

10/13/00  
JC715 U.S. PTO

10-16-00

A

Please type an "+" inside this box  +

PTO/SB/05 (4/98) Approved for use through 09/30/2000 OMB 0651-0032  
Patent and Trademark Office U S DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No 4034-61

First Named Inventor or Application Identified Phillip Koh-Kwe Hsu et al.

Title System and Method For Delivering A Financial Message

Express Mail Label No. EL650348157US

JDE41 U.S.P.T.O.  
10/13/00

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents		ADDRESS TO: <b>Assistant Commissioner for Patents Box Patent Application Washington, DC 20231</b>
--	--	--

1.  \*Fee Transmittal Form  
(Submit an original, and a duplicate for fee processing)
2.  Specification [Total Pages ]  
(preferred arrangement as set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3.  Drawing(s) (35 USC 113) [Total Sheets ]
4. Oath or Declaration [Total Pages ]
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 17 completed)  
*[Note Box 5 below]*
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)

\*NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

5.  Microfiche Computer Program (Appendix)
6. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a.  Computer Readable Copy
  - b.  Paper Copy (identical to computer copy)
  - c.  Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

7.  Assignment Papers (cover sheet & documents(s))
8.  37 CFR 3.73(b) Statement  Power of Attorney  
(when there is an assignee)
9.  English Translation Document (if applicable)
10.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
11.  Preliminary Amendment
12.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
13.  \*Small Entity  Statement filed in prior application, Statements(s) Status still proper and desired (PTO/SB/09-12)
14.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
15.  Other: Certification of Mailing \_\_\_\_\_

**16. If a CONTINUING APPLICATION**, check appropriate box and supply the requisite information below and in a preliminary amendment

Continuation  Divisional  Continuation-in-part (CIP) of prior application No. \_\_\_\_\_  
Prior application information Examiner \_\_\_\_\_ Group/Art Unit \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

Customer Number or Bar Code Label  (Insert Customer No. or Attach bar code label here) or  Correspondence address below

NAME	Leslie Gladstone Restaino, Esq. Riker, Danzig, Scherer, Hyland & Perretti LLP		
ADDRESS	Headquarters Plaza One Speedwell Avenue		
CITY	Morristown	STATE	NJ ZIP CODE
COUNTRY	USA	TELEPHONE	973-538-0800 FAX 973-359-0984

Name (Print/Type)	Leslie Gladstone Restaino, Esq.	Registration No. (Attorney/Agent)	38,893
Signature	Leslie Gladstone Restaino		

Burden Hour Statement This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to The Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>FEE TRANSMITTAL</b> <b>for FY 2001</b>		<b>Complete If Known</b>  P1 U.S. JC841 09/687892 10/13/00																																																																																																																																																																																																																																																														
<small>Patent fees are subject to annual revision          Small Entity payments must be supported by a small entity statement          otherwise large entity fees must be paid. See Forms PTO/SB/09-12          See 37 C.F.R. § 1.27 and 1.28</small>																																																																																																																																																																																																																																																																
<b>TOTAL AMOUNT OF PAYMENT</b>		(\$)		768.00	Attorney Docket Number	4034-61																																																																																																																																																																																																																																																										
<b>METHOD OF PAYMENT</b> (check one)				<b>FEE CALCULATION (continued)</b>																																																																																																																																																																																																																																																												
1 <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to Deposit Account Number 50-0444  Deposit Account Name Riker, Danzig, Scherer, Hyland & Perretti LLP <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 C.F.R. § 1.16 and 1.17				<b>3 ADDITIONAL FEES</b> <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provision filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920**</td><td>112</td><td>920**</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840**</td><td>113</td><td>1,840**</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>380</td><td>216</td><td>190</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>870</td><td>217</td><td>435</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,360</td><td>218</td><td>680</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,850</td><td>228</td><td>925</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>300</td><td>219</td><td>150</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>300</td><td>220</td><td>150</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>260</td><td>221</td><td>130</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,210</td><td>241</td><td>605</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,210</td><td>242</td><td>605</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>430</td><td>243</td><td>215</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>580</td><td>244</td><td>290</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>240</td><td>126</td><td>240</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>40.00</td></tr> <tr><td>146</td><td>690</td><td>246</td><td>380</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>690</td><td>249</td><td>380</td><td>For each additional invention to be examined (37 CFR 1.29(b))</td><td></td></tr> <tr><td colspan="6">Other fee (specify) _____</td></tr> <tr><td colspan="6">Other fee (specify) _____</td></tr> <tr> <td colspan="4"> <b>SUBTOTAL (1)</b> (\$)         </td> <td colspan="3"> <b>SUBTOTAL (3)</b> (\$)         </td> </tr> <tr> <td colspan="4"> <b>2 EXTRA CLAIM FEES</b>          Total Claims 21 -20*= 1 X 18.00 = 18.00          Independent Claims 3 - 3*= _____ X _____ = _____          Multiple Dependent       </td> <td colspan="3"></td> </tr> <tr> <td colspan="6"> <small>* or number previously paid, if greater, For Reissues, see below</small> </td> </tr> <tr> <td colspan="4"> <b>Large Entity Fee Code</b>          Fee (\$)       </td> <td colspan="3"> <b>Small Entity Fee Code</b>          Fee (\$)       </td> </tr> <tr> <td colspan="4">         103 18 203 9 Claims in excess of 20       </td> <td colspan="3">         Fee Description       </td> </tr> <tr> <td colspan="4">         102 80 202 40 Independent claims in excess of 3       </td> <td colspan="3"></td> </tr> <tr> <td colspan="4">         104 270 204 135 Multiple dependent claim       </td> <td colspan="3"></td> </tr> <tr> <td colspan="4">         109 80 209 40 *Reissue independent claims over original patent       </td> <td colspan="3"></td> </tr> <tr> <td colspan="4">         110 18 210 9 *Reissue claims in excess of 20 and over original patent       </td> <td colspan="3"></td> </tr> <tr> <td colspan="4"> <b>SUBTOTAL (2)</b> (\$)         </td> <td colspan="3"> <b>SUBTOTAL (3)</b> (\$)         </td> </tr> <tr> <td colspan="6"></td> <td style="text-align: right;">**Reduced by Basic Filing Fee Paid</td> </tr> </tbody></table>			Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provision filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920**	112	920**	Requesting publication of SIR prior to Examiner action		113	1,840**	113	1,840**	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	380	216	190	Extension for reply within second month		117	870	217	435	Extension for reply within third month		118	1,360	218	680	Extension for reply within fourth month		128	1,850	228	925	Extension for reply within fifth month		119	300	219	150	Notice of Appeal		120	300	220	150	Filing a brief in support of an appeal		121	260	221	130	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,210	241	605	Petition to revive - unintentional		142	1,210	242	605	Utility issue fee (or reissue)		143	430	243	215	Design issue fee		144	580	244	290	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional applications		126	240	126	240	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)	40.00	146	690	246	380	Filing a submission after final rejection (37 CFR 1.129(a))		149	690	249	380	For each additional invention to be examined (37 CFR 1.29(b))		Other fee (specify) _____						Other fee (specify) _____						<b>SUBTOTAL (1)</b> (\$)				<b>SUBTOTAL (3)</b> (\$)			<b>2 EXTRA CLAIM FEES</b> Total Claims 21 -20*= 1 X 18.00 = 18.00 Independent Claims 3 - 3*= _____ X _____ = _____ Multiple Dependent							<small>* or number previously paid, if greater, For Reissues, see below</small>						<b>Large Entity Fee Code</b> Fee (\$)				<b>Small Entity Fee Code</b> Fee (\$)			103 18 203 9 Claims in excess of 20				Fee Description			102 80 202 40 Independent claims in excess of 3							104 270 204 135 Multiple dependent claim							109 80 209 40 *Reissue independent claims over original patent							110 18 210 9 *Reissue claims in excess of 20 and over original patent							<b>SUBTOTAL (2)</b> (\$)				<b>SUBTOTAL (3)</b> (\$)									**Reduced by Basic Filing Fee Paid
Large Entity Fee Code	Small Entity Fee Code	Fee (\$)	Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																																																																																																											
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																																																																																																																												
127	50	227	25	Surcharge - late provision filing fee or cover sheet																																																																																																																																																																																																																																																												
139	130	139	130	Non-English specification																																																																																																																																																																																																																																																												
147	2,520	147	2,520	For filing a request for reexamination																																																																																																																																																																																																																																																												
112	920**	112	920**	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																																																																																												
113	1,840**	113	1,840**	Requesting publication of SIR after Examiner action																																																																																																																																																																																																																																																												
115	110	215	55	Extension for reply within first month																																																																																																																																																																																																																																																												
116	380	216	190	Extension for reply within second month																																																																																																																																																																																																																																																												
117	870	217	435	Extension for reply within third month																																																																																																																																																																																																																																																												
118	1,360	218	680	Extension for reply within fourth month																																																																																																																																																																																																																																																												
128	1,850	228	925	Extension for reply within fifth month																																																																																																																																																																																																																																																												
119	300	219	150	Notice of Appeal																																																																																																																																																																																																																																																												
120	300	220	150	Filing a brief in support of an appeal																																																																																																																																																																																																																																																												
121	260	221	130	Request for oral hearing																																																																																																																																																																																																																																																												
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																																																																																																												
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																																																																																																																												
141	1,210	241	605	Petition to revive - unintentional																																																																																																																																																																																																																																																												
142	1,210	242	605	Utility issue fee (or reissue)																																																																																																																																																																																																																																																												
143	430	243	215	Design issue fee																																																																																																																																																																																																																																																												
144	580	244	290	Plant issue fee																																																																																																																																																																																																																																																												
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																																																																																																												
123	50	123	50	Petitions related to provisional applications																																																																																																																																																																																																																																																												
126	240	126	240	Submission of Information Disclosure Stmt																																																																																																																																																																																																																																																												
581	40	581	40	Recording each patent assignment per property (times number of properties)	40.00																																																																																																																																																																																																																																																											
146	690	246	380	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																																																																																																												
149	690	249	380	For each additional invention to be examined (37 CFR 1.29(b))																																																																																																																																																																																																																																																												
Other fee (specify) _____																																																																																																																																																																																																																																																																
Other fee (specify) _____																																																																																																																																																																																																																																																																
<b>SUBTOTAL (1)</b> (\$)				<b>SUBTOTAL (3)</b> (\$)																																																																																																																																																																																																																																																												
<b>2 EXTRA CLAIM FEES</b> Total Claims 21 -20*= 1 X 18.00 = 18.00 Independent Claims 3 - 3*= _____ X _____ = _____ Multiple Dependent																																																																																																																																																																																																																																																																
<small>* or number previously paid, if greater, For Reissues, see below</small>																																																																																																																																																																																																																																																																
<b>Large Entity Fee Code</b> Fee (\$)				<b>Small Entity Fee Code</b> Fee (\$)																																																																																																																																																																																																																																																												
103 18 203 9 Claims in excess of 20				Fee Description																																																																																																																																																																																																																																																												
102 80 202 40 Independent claims in excess of 3																																																																																																																																																																																																																																																																
104 270 204 135 Multiple dependent claim																																																																																																																																																																																																																																																																
109 80 209 40 *Reissue independent claims over original patent																																																																																																																																																																																																																																																																
110 18 210 9 *Reissue claims in excess of 20 and over original patent																																																																																																																																																																																																																																																																
<b>SUBTOTAL (2)</b> (\$)				<b>SUBTOTAL (3)</b> (\$)																																																																																																																																																																																																																																																												
						**Reduced by Basic Filing Fee Paid																																																																																																																																																																																																																																																										

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Leslie Gladstone Restaino, Esq	Registration No (Attorney/Agent)	38,893	Telephone	973-538-0800
Signature	<i>Leslie Gladstone Restaino</i>			Date	10/13/2000

**WARNING**

Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

**SYSTEM AND METHOD FOR  
DELIVERING A FINANCIAL MESSAGE**

**BACKGROUND OF THE INVENTION**

5

Field of the Invention

The present invention relates to a system and method for delivering a financial message to users, and more particularly, an electronic message containing predefined financial information and financial updates.

10

Description of the Prior Art

New client demands, technological innovations and tighter regulatory controls are changing the shape of the money management industry. The evolution of the Internet and the development of new technological capabilities are pressing security houses to develop methods that facilitate the need for efficient trading. In traditional asset management, customers are advised by financial advisors who interact with traders to execute securities trades on behalf of the customer. The ability of a customer and their financial advisor to have current information regarding the customer's specific portfolio as well as general market conditions often makes the difference between profitability and unprofitability.

Heretofore, many have attempted to provide such information to customers through various means. One such example is shown in U.S. Patent No. 5,872,921 to Zahariev et al., which teaches a system for analyzing a large data stream by applying time slices to create successive finite feed records which are compared to stored criteria for significance. U.S. Patent No. 5,893,091 to Hunt teaches a system for electronically distributing information to users based on predefined criteria.

None of the related art references, however, teach a system and method for electronically providing users with financial updates regarding: order status, a user's specific portfolio and general financial information. In addition, none of the related art references teach the delivery of messages in

accordance with predefined client user preferences such as specific account information; specific financial information; and the format of the message (e.g., detailed or summary). Furthermore, none of the related art references disclose a system and method which allows internal users (e.g., financial 5 advisors) to monitor messages sent to client users as well as edit and/or add information in the messages.

### **SUMMARY OF THE INVENTION**

In accordance with the present invention there is provided a system 10 and method for delivering an electronic message to users. In particular, the present invention provides an electronic message containing order status, a specific user portfolio and/or general financial information for delivery to participating users. In addition, the system and method of the present invention allows the electronic message to be generated and delivered in 15 accordance with predefined preferences. Moreover, the present invention provides varying levels of interactivity with users and/or their messaging accounts and an intervention system that allows an internal user to provide personalized notes to messages.

A first aspect of the invention provides a system for delivering a 20 financial message to a client user regarding financial activity, comprising a registration system configured to register a client user and determine the messages received by the client user; a message creation system configured to monitor financial activity, create messages as requested by the client user regarding the activity and deliver messages; and an intervention system 25 configured to allow an internal user of the system to add to or edit content of a message to a client user prior to delivery.

A second aspect of the invention provides an internal user interface 30 system for an internal user of a financial message delivery system. The interface system comprises means for designating internal user message preferences; means for designating client user message preferences; means for viewing client user or internal user messages; means for replying to client

user messages; means for creating messages; and means for searching for messages for a client user.

Another aspect of the invention provides a method for delivering a financial message to a client user comprising the steps of gathering client user 5 message preferences from the client user; creating a client user message according to the client user message preferences; adding a personalized note from an internal user to a client user message prior to delivery; and delivering the message with the personalized note to the client user.

Advantageously, the systems and method of the present invention 10 deliver an electronic message to client users in accordance with predefined preferences. In this way, users are provided with updated financial information in a streamlined, efficient manner. As such, the present invention affords users the ability to make intelligent, profitable, finance-related decisions. Furthermore, the systems and method provide mechanisms for 15 internal users to better monitor client user messages and provide proactive advice via personalized notes, called touchpoints.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

These and other features and advantages of this invention will be 20 more readily understood from the following detailed description of the various aspects of the invention taken in conjunction with the accompanying drawings in which:

FIG. 1 is a block diagram of a financial communication system including a messaging system for delivering electronic messages in 25 accordance with the invention;

FIG. 2 is a block diagram of the messaging system of FIG. 1;

FIG. 3 illustrates a first preferred embodiment of a client user preference interface of a registration system of the present invention;

FIG. 4 illustrates an additional aspect of the client user preference 30 interface of FIG. 3;

FIG. 5 illustrates a second embodiment of a client user preference

interface;

FIG. 6 is a block diagram of an internal user interface system;

FIG. 7 illustrates an advisor preference interface;

FIG. 8 illustrates a client user searching interface;

5 FIG. 9 illustrates an internal user client user preference interface;

FIG. 10 illustrates a client user list edit interface;

FIG. 11 illustrates an advisor message viewing interface;

FIG. 12 illustrates a manager message viewing interface;

10 FIG. 13 illustrates a client service agent message viewing interface showing client user messages;

FIG. 14 illustrates a client service agent message viewing interface showing advisor messages;

FIG. 15 illustrates a message disclaimer interface;

FIG. 16 illustrates a new message type designation interface;

15 FIG. 17 illustrates a message template creation interface;

FIG. 18 is a block diagram of a message creation system;

FIG. 19 illustrates an initial internal user touchpoint interface;

FIG. 20 illustrates a first new touchpoint entry interface;

FIG. 21 illustrates a second new touchpoint entry interface;

20 FIG. 22 illustrates a view touchpoint interface;

FIG. 23 illustrates a touchpoint editing interface;

FIG. 24 illustrates a marketing agent touchpoint entry interface;

FIG. 25 illustrates a new product touchpoint entry interface;

FIG. 26 illustrates a view product touchpoint interface;

25 FIG. 27 illustrates an edit product touchpoint interface;

FIG. 28 illustrates a touchpoint document attachment interface;

FIG. 29 is a block diagram of additional features of the messaging system of FIG. 2;

FIG. 30 illustrates a first electronic message in summary format;

30 FIG. 31 illustrates a second electronic message in summary format;

FIG. 32 illustrates a client user message viewing window, or inbox, in

accordance with a first preferred embodiment;

FIG. 33 lists the financial security status messages in the first preferred embodiment;

FIG. 34 illustrates a detailed electronic message relating to research  
5 reevaluation;

FIG. 35 illustrates a detailed electronic message relating to expiring options;

FIG. 36 illustrates a detailed electronic message relating to called bonds;

10 FIG. 37 illustrates a detailed electronic message relating to maturing securities;

FIG. 38 illustrates a detailed electronic message relating to order status;

15 FIG. 39 illustrates an electronic message defining possible order status;

FIG. 40 illustrates another electronic message defining possible order status;

FIG. 41 illustrates a client user message viewing window, or inbox, in accordance with a second preferred embodiment;

20 FIG. 42 illustrates a message reply window; and

FIG. 43 is a flowchart of a method for delivering a financial message to a client user in accordance with the invention.

### **DETAILED DESCRIPTION OF THE INVENTION**

25 For convenience purposes only, the description includes the following sections:

- I. Overview
- II. Messaging System
  - A. Registration System
  - B. Security/Authentication System
  - C. Internal User Interface System

- D. Message Creation System
- E. Compliance Review System
- F. Intervention System
- G. Additional Features

5            III. Messages

- IV. Method

## I. Overview

Generally stated, the present invention provides a computer  
10 implemented financial communication system and method for delivering high  
value electronic messages to users. The content of these messages is diverse  
and may include security order status, specific portfolio and general financial  
information. In addition, the system allows users to designate preferences for  
15 receiving the electronic message(s). Advantageously, the system also allows  
certain internal users, such as financial advisors, to intervene by adding or  
editing content (known as "touchpoints") to the delivered message in order to  
provide proactive and timely financial advice.

FIG. 1 is a block diagram of a financial communication system 10 in  
accordance with a preferred embodiment of the present invention. System 10  
20 is preferably a computer system that includes memory 12, CPU 14,  
input/output devices (I/O) 16, and bus 18. Database 20, as will be described  
in more detail below, may also be provided. A market feed 21 provides  
information such as real time price, quantity and quote information to system  
10.

25            Memory 12 preferably includes a program product (messaging system  
24) that, when executed by CPU 14, comprises various functional capabilities  
described in further detail below. Memory 12 (and database 20) may  
comprise any known type of data storage system and/or transmission media,  
including magnetic media, optical media, random access memory (RAM),  
30 read only memory (ROM), a data object, etc. Moreover, memory 12 (and  
database 20) may reside at a single physical location comprising one or more

types of data storage, or be distributed across a plurality of physical systems. CPU 14 may likewise comprise a single processing unit, or a plurality of processing units distributed across one or more locations, e.g., on a client and server. I/O 16 may comprise any known type of input/output device including 5 a network system, modem, keyboard, mouse, voice recognition system, CRT, printer, disc drives, etc. Additional components, such as cache memory, communication systems, system software, etc., may also be incorporated into system 10.

System 10 may reside on a personal computer that may or may not be 10 part of a computer network. However, as recognized in the field, system 10 preferably includes one or more central computer, i.e., server. Here, system satellite servers may each contain only one system/module with the remainder of the systems/modules resident on a centrally located server. In another embodiment, a number of servers may be present in a central location, each 15 having different software applications resident therein. Alternatively, a number of servers may reside in a central location, each containing all of the systems/modules resident therein. A server computer typically comprises an advanced mid-range multiprocessor-based server, such as the Ultra II from Sun Microsystems or the RS6000 from IBM, utilizing standard operating 20 systems, software written in C++, Java or a similar language, which is designed to drive the operation of the particular hardware and which is compatible with other system components, and I/O controllers. A personal computer may typically comprise an INTEL PENTIUM III microprocessor, or like processor, such as found in a Dell Dimensions XTS T450 computer.

25 In the following discussion, it will be understood that the method steps discussed are preferably performed by processor 14 executing program product/instructions stored in memory 12, such as instructions of messaging system 24. Program product can be initially loaded into memory from a computer readable medium 22. It is understood that the various devices, 30 modules, mechanisms and systems described herein may be realized in hardware, software, or a combination of hardware and software. They may be

implemented by any type of computer system or other apparatus adapted for carrying out the methods described herein. A typical combination of hardware and software could be a general-purpose computer system with a computer program that, when loaded and executed, controls the computer system such that it carries out the methods of the present invention. Alternatively, a specific use computer, containing specialized hardware for carrying out one or more of the functional tasks of the invention could be utilized. The present invention may also be embedded in a computer program product, which comprises all the features enabling the implementation of the methods and functions described herein, and which - when loaded in a computer system - is able to carry out these methods and functions. Computer program, software program, program, program product, or software, in the present context mean any expression, in any language, code or notation, of a set of instructions intended to cause a system having an information processing capability to perform a particular function either directly or after the following: (a) conversion to another language, code or notation; and/or (b) reproduction in a different material form.

As used herein, a "user" refers to any individual or entity that uses system 10. Convenient subcategories of users may include "client users" 8 and "internal users" 9, as shown in FIGS. 1 and 2. A "client user" 8 may be any individual or entity that is a customer of the proprietor's system 10 such as an individual using an online transaction forum of a financial service corporation. An "internal user" 9 refers to a system proprietor's internal personnel. In the preferred financial service corporation setting, this may include financial advisors, managers, marketing agents, client service agents (CSA's), administrators and any other internal personnel of the system proprietor. System 10 provides for varying levels of permission for internal users to interact with the client users, as will be described below.

A user 8, 9 may access system 10 via a direct terminal connected to system 10, or a remote workstation in a client-server environment such as those indicated above. In the latter case, the client and server may be

connected via the Internet, wide area networks (WAN), local area networks (LAN) or other private networks. The server and client may utilize conventional token ring connectivity for WAN, LAN, or other private networks, or Ethernet, or other conventional communications standards.

5 Where a user 8, 9 is connected to a system server via the Internet, connectivity could be provided by conventional TCP/IP sockets-based protocol. In this instance, an Internet service provider outside system 10 would provide connectivity to a system server within system 10. In a preferred setting, client users 8 connect to system 10 via an online financial  
10 transaction forum, while an internal user 9 accesses system 10 via an internal application or browser interface such as those described in co-pending U.S. applications entitled "Systems for Providing Financial Services" and "Browser Interface and Network Based Financial Service System," both of which are expressly incorporated herein by reference.

15

## II. Messaging System

Referring now to FIG. 2, messaging system 24 in accordance with the first preferred embodiment of the present invention is shown. In particular, messaging system 24 includes a registration system 30 including a registration interface module 130, a security and authentication system 80, an internal user interface system 90, a message creation system 320, a compliance review system 330, an intervention (touchpoint) system 340 and additional features 460. Also shown in FIG. 2 is a more detailed view of database 20 which may include, for example, a transaction database 102 for storing information relating to orders and their status, dividends and interest payments; a securities database 104 for storing information pertaining to expiring options, bond swaps, called bonds, maturing securities and research reevaluations; a margins database 106 for storing information pertaining to fed calls, equity calls, stock exchange calls and house calls; a holdings database 108 for storing information concerning account balances; and a preference database 110 for storing user preferences. It should be appreciated that database 20 can

be comprised of any number of databases. For example, all data could be stored in one database. As mentioned above, market feed 21 provides real time price, quantity and quote information to messaging system 10, which may be stored in database 20 for convenience.

5

#### A. Registration System

Registration system 30 is configured to register a client user and determine the messages received by a client user. As mentioned above, in the preferred setting of a financial service corporation, a client user 8 may gain 10 access to registration system 30 via a hypertext link on the system proprietor's website. In a most preferred setting, a client user 8 may gain access via an online transaction forum.

As shown in FIGS. 3-4, in accordance with a first embodiment of registration system 30, when a client user 8 first gains access to registration 15 system 30, he or she is presented with a client user preference interface 31 created by registration interface module 130. Using client user preference interface 31, a client user 8 can set up their messaging account and preferences with system 10. As discussed below, user preferences determine the messages received by a client, format of the message, delivery device, etc. 20 Among the preferences that can be designated are individual eligible accounts 32, delivery options 40, electronic mailing address 50 and desired message topics 54-66 (FIG. 4). When designating accounts 32, client user 8 can view each account 34 and designate specific accounts for the receipt of relevant messages. As shown, each account 34 is individually designated by 25 checking a YES box 36. Alternatively, client user 8 may check a NO box 38, thereby indicating that relevant messages should not be provided. In the event user 8 neglects to check either box for a specific account 34, a default setting by the system proprietor will provide instructions for delivery or non-delivery of relevant messages. Of course, other means for designating

accounts could be implemented. For example, all accounts could be designated with one check box.

Once designated accounts 34 are selected, delivery format 40 is chosen. This dictates the level of detail in the electronic message.

5 Specifically, client user 8 can receive a detailed message 42 containing all pertinent information or a notification 44 with information in summary format. In the latter case, client user 8 receives a notification advising that the details of the relevant message are located within the messaging system, preferably in the user's inbox (shown in FIGS. 32 and 41). Once delivery  
10 format 40 has been designated, client user 8 designates the electronic mailing address 50 to which the message should be sent.

FIG. 4 illustrates an additional aspect of client user preference interface 31, namely, message topics designation window 52. Here, client user 8 designates specific topics 54-66 for which he or she would like to receive messages. As shown, the topics may include trading order status 54, research reevaluation 56, expiring options 58, maturing bonds, 60, called bonds 62, highlighted stocks list 64 and focus list recap 66. Order status 54 informs client user 8 of the status of a buy or sell order (e.g., open, partially executed, fully executed, canceled, etc.). Research reevaluation 56 informs  
15 client user 8 if specific portfolio securities have received new ratings (e.g., neutral, attractive, etc.). Expiring options 58 informs the user if any options in an individual portfolio are due to expire in an upcoming pre-determined time period. Likewise, maturing bonds 60 and called bonds 62 inform client user 8 if any bonds in an individual portfolio are due to expire or be called,  
20 respectively, in an upcoming pre-determined time period. Highlighted stocks list 64 presents client user 8 with a choice group of companies from the core investment themes identified by an internal strategy group. Focus list recap 66 provides client user 8 with a list of stocks, all rated "Buy" or "Attractive," selected by a committee of investment professionals. In preparing the focus  
25 list, a proprietary stop-loss mechanism is employed that is designed to minimize risk.

Message topics 54-66 can be grouped into three categories: (1) order status; (2) user financial security status; and (3) general information. Order status includes information pertaining to order(s) placed by client user 8, regardless of whether the order was based on a security currently in a user's portfolio (e.g., a buy order). User security status pertains to information concerning the user's individual portfolio, and includes, for example, research reevaluation 56, expiring options 58, maturing bonds 60 and called bonds 62.

General information includes general financial information as well as highlighted stocks list 64 and focus list recap 66. Of course, other topics could be included. It is the intent of the present invention to provide a client user a message containing order status, customer financial security status and general information according to pre-designated preferences.

Specific topics 54-66 are designated for message receipt in the manner described above for designating accounts. Similarly, failure to check a box for a particular topic causes the system to default to a setting chosen by the system proprietor (i.e., delivery or non-delivery). Once the preferences have been designated by client user 8, the preferences are stored in database 20 (e.g., in preference database 110).

A second embodiment of a client user preference interface 131, created by registration interface module 130, is shown in FIG. 5. While client user interface module 131 provides similar features as the first embodiment, it also allows selection of additional messaging system 24 functionality. For instance, a selection of delivery criteria 141 is provided, as discussed below.

Turning to the details of client user preference interface 131, a client user 8 may select the financial accounts 140 for which they wish to receive messages. This allows a user with multiple accounts to individually designate accounts for the receipt of messages. Once accounts 140 are selected, client user 8 designates delivery criteria 141 to add or edit delivery options. As shown, user 8 may choose delivery device types 142, delivery device name 144, and device address 146. Delivery device types 142 may include facsimile, electronic mail, telephone, pager, personal digital assistant or other

wireless devices, as well as any other device known or hereafter developed. Delivery device name 144 selection allows user 8 to designate a particular name for each identified delivery device type. Delivery address 146 allows user 8 to specify necessary routing information (e.g., electronic mailing address) to ensure proper delivery of the message. User 8 can also specify a particular time or date 147 during which delivery of messages is disabled. This allows user 8 to minimize interruptions or the occurrences of messages sent at unfavorable times. Add button 148 adds the above-indicated delivery criteria 141 to the user's messaging account so that the designated delivery criteria need only be input once. By manipulating criteria toggle 150, user 8 can enable or delete previously designated delivery criteria 141.

Once delivery criteria 141 are designated, message criteria 151 is utilized to add or edit message requests. This allows user 8 to select receipt of specific financial messages. Message criteria 151 includes message category 152, message topic/type 154, delivery device 156 and message format 158. As discussed above, the message types can be grouped into one or more categories. Within each category 152, user 8 can select a particular message topic/type 154 to receive, such as "expiring options," as well as a specific delivery device 156 as previously designated at delivery criteria 141. User 8 also indicates message formats, e.g., in generic, short or detailed format. A generic format indicates only that a message relating to a user portfolio is available, similar to the above discussed notification. A user must then log onto system 10, e.g., through an online transaction forum for client users 8, and go to their inbox (FIGS. 32 and 41). If user 8 chooses the short format, only a highlight of a message is sent to designated delivery device 156 with the details routed to the user's inbox (FIGS. 32 and 41). By way of contrast, where a detailed format is chosen, all details are sent to designated delivery device 156.

User 8 can add message criteria 151 to his or her messaging account by selecting the add button 160. As with delivery criteria 141, a criteria toggle 165 is provided to allow user 8 to enable or delete previously designated

message criteria 151. Once all preferences/criteria have been designated, they are preferably stored in database 20 (e.g., preference database 110) and accessed by message creation system 320, as will be described below. It should be understood that the preferences/criteria illustrated in FIGS. 3-5 are  
5 not intended to be exhaustive and other functions may be provided.

### B. Security/Authentication System

When active users (i.e., registered client users 8 and internal users 9) establish communication with system 10, security and authentication system  
10 80 queries the user for a password and preferably other authentication information, such as a universal user name. Security and authentication system 80 is described in detail in co-pending U.S. applications entitled "Systems for Providing Financial Services" and "Browser Interface and Network Based Financial Service System," which are both expressly  
15 incorporated herein by reference.

As mentioned above, client user 8 preferably accesses system 10 via an online transaction forum, while an internal user accesses system 10 via an internal application or browser interface. In the case of an active client user 8, system 10 may initially differentiate that registered client user from a non-  
20 registered client user by, for example, the presence of a 'cookie' on the user's system. Authentication information is transmitted to a security function (not shown) resident in system 10 where user 8, 9 is authenticated. This procedure provides for confirmation of the user's 8, 9 identity. Of course, a user 8, 9 will be denied access to system 10 where authentication does not occur. The  
25 security functionality described herein also provides a single point of security control for adding or removing a user 8, 9 from system 10.

Security and authentication system 80 also controls each user's entitlement to interact with system 10. Alternatively, another authentication system outside of system 10 may serve to authenticate a user. In this  
30 instance, security and authentication system 80 would receive this information from the outside system and store user entitlements in security and

authentication system 80. In addition, a system proprietor may designate specific users 8, 9 eligible to interface with system 10. Advantageously, this feature restricts use of system 10 to selected users or user groups. This allows for varying levels of interaction by various user groups/types.

5 Once authenticated, a user 8, 9 is brought to an appropriate interface, as will be described in more detail below. The routing of users to their appropriate interfaces is accomplished by security and authentication system 80. For instance, when an unregistered client user 8 accesses system 10, they are brought to client user preference registration system 30 and client user 10 preference interface 31, 131. A registered client user 8 will be brought to their inbox (FIGS. 32 and 41) and internal users 9 to internal user interface system 90 as described below.

### C. Internal User Interface System

15 When an internal user 9 accesses system 10 via, for example, the above-mentioned "Systems for Providing Financial Services" and "Browser Interface and Network Based Financial Service System," an internal user interface system 90, shown in FIG. 6, is activated. Internal user interface system 90 (IUI system) provides a variety of functions advantageous to 20 specific internal users. For instance, via IUI system 90 internal users 9 may designate financial advisor (FA) preferences, designate client user preferences, search client users, edit specific client users for the receipt of a particular message and view client user and/or internal user messages. As shown in FIG. 6, IUI system 90 includes a financial advisor interface module 25 170, a manager interface module 172, a system administration interface module 174, a CSA interface module 176, a marketing interface module 178, a service interface module 180 and a reporting module 182. The particular modules accessible to internal user 9 depends on their entitlement level as determined by security and authentication system 80.

30 While the details of each interface module's functions will be described below, it should be recognized, although not expressly shown, that

IUI system 90 may also include precursor selection interfaces and/or menus specific to a particular internal user 9 which allows user 9 to move between allowable (i.e., entitled) interfaces. For instance, each interface in FIGS. 7-17 includes a menu on left side of the display for moving between entitled 5 interfaces. Furthermore, it should be recognized that while certain functions will be described as part of specific modules/interfaces, the entitlement level of certain internal users 9 may allow access to a variety functions outside of the particular 'main' module. For example, an advisor may be able to create message templates although that is described as a marketing interface module 10 function. Accordingly, the compartmentalization of functions into a particularly termed module/interface should not be interpreted as a limitation on the internal users 9 that may access those functions.

Referring now to FIG. 7, an advisor preference interface 186, created by financial advisor interface module 170, is shown. As with client user's 15 preference interface 32, 132, a financial advisor may select preferences for receiving his or her messages from interface 186. First, an advisor may designate delivery criteria 188 by designating delivery type 190, delivery device name 192 and delivery address 194. In addition, the advisor can designate times and/or dates 196 for which messages should be disabled. 20 Once the desired delivery criteria 188 have been designated, the advisor can save the criteria to their messaging account by selecting add button 189 and enable or delete each delivery criteria individually via delivery criteria toggle 198.

After delivery criteria 188 have been designated, the advisor 25 designates his or her message criteria 199. As illustrated, an advisor can select a message category 200, a message topic/type 202, a delivery device 204 for the message and a message format 206. In addition, an advisor can select specific client users 208 (e.g., individual, all client users or client user group) about whom the advisor will receive such messages. In order to select 30 individual client users 8, the advisor can perform a system search for a particular client user. For example, as shown in FIG. 8, an advisor can access

a client user search interface 191 using the select user's feature 208 from the advisor preference interface 186 of FIG. 7. At interface 191, the advisor can search for a particular client user 8 using various user identifiers 193 such as name, account number, login, portfolio value/value range, or the like. User viewing window 195 lists all client users 8 matching the advisor's search, which the advisor can then individually select.

Returning to FIG. 7, once the advisor's message criteria 199 have been designated, the advisor can select add button 209 and the message criteria is saved to the advisor's messaging account. Message criteria toggle 210 allows the advisor to enable or delete each criteria individually. In addition, the advisor can designate advisor copy criteria 212 if they desire to receive a copy of any or all client user 8 messages. By utilizing advisor copy criteria 212, the advisor can accomplish this and thus avoid having to independently determine the messages received by specific client users 8. This is accomplished by selecting message category 214, message topic/type 216, delivery device 218, delivery format 220 and cross-referencing these selections to specific client user(s) 224. Client users can be selected by categories such as all customers, groups or individually. Where client users 8 are selected in groups or individually, the advisor may utilize user search window 191 of FIG. 8, as described above. Add button 225 allows the advisor criteria 212 to be saved to the advisors messaging account. Similar to the other criteria described herein, the advisor can delete or enable each customer copy criteria via criteria toggle 226.

It should be appreciated that other functions can be performed by the advisor and those listed herein are not intended to be exhaustive. For example, the advisor may have capability/permission to send manual messages independent of financial messages.

Referring now to FIG. 9, an advisor client user preference designation interface 228, created by financial advisor interface module 170, is shown. This interface 228 allows an advisor (and other internal users 9 with similar permissions) to view, edit or designate preferences on behalf of a client user

8. The advisor can view a particular client user's preferences by entering search criteria 230 and performing a search 232 using a client user search mechanism. As discussed above, the search can be performed based on various factors such as name, account number, login, portfolio value, and the like. The results of the advisor's search are displayed on client user viewing window 234. When a particular client user is selected, the client user's preferences are displayed as delivery criteria 235 and message criteria 247. As described above, at delivery criteria 235, the advisor can add or edit delivery options including delivery device type 236, delivery device name 238 and delivery address 240. Moreover, the advisor can designate a time or date 242 when messaging is disabled. Once the desired delivery criteria 235 have been designated, the advisor can save the criteria 235 to a client user's messaging account by selecting add button 244. By manipulating criteria toggle 246, the advisor may also enable or delete each delivery criteria. After delivery criteria 235 have been designated, the advisor designates the client user message criteria 247 as explained above. Specifically, the advisor selects message category 248, message topic/type 250, delivery device 252, and message format 254, as well as enable/delete messages via criteria toggle 256.

Additional features for use by the advisor include mechanism 258 for determining if a client user 8 desires custom messages as well as a mechanism for viewing such messages. Further, a reply destination selector 260 allows the advisor to determine the routing of a client user's reply to a message. Preferably, the reply is routed to the advisor or other internal user 9. The ability of advisors and/or other internal users 9 to be able to designate client user 8 preferences not only enhances service, but also aids in ensuring that the most relevant financial information is received by client user 8.

FIG. 10 shows a client user list edit interface 262 that allows an advisor or other entitled internal user 9 to view and/or edit client user's assigned to receive particular messages or message topics/types. The example shown in FIG. 10 lists all client users 8 of a particular advisor designated to receive messages concerning expiring options. Listed for each client user 8

are identifiers such as their account number, login, etc. A user can be "tagged" for non-receipt of the message by the client user list toggle 264. Accordingly, internal users 9 can prevent transmission of information that may be misunderstood, misused, etc., by a client user 8. This feature also 5 provides a safeguard mechanism for preventing transmission of messages that are inappropriate relative to legal and regulatory matters.

FIG. 11 illustrates an advisor message viewing interface or inbox 266 that allows the advisor to selectively view client user or advisor messages using view selector 268. Shown in FIG. 11 are the messages received in 10 response to preferences designated by the advisor at advisor preference interface 186 (FIG. 7). In message display window 270, the advisor is alerted as to, for example, the status of the message (e.g., read or unread), the date received, the message category, the message type and a message subject. In addition, the advisor can delete any messages from the inbox 266. If the 15 advisor selects to view client user messages at view selector 268, the messages for the client users are shown. However, the advisor cannot choose to delete client user messages from the inbox 266.

FIG. 12 shows a manager user message viewing interface 272, created by manager interface module 172 (FIG. 6), that allows managers to view 20 individual user and/or advisor messages. Users 8, 9 can be searched by search criteria 274 such as advisor, client user name, date, login, account, message type or any other known way to identify users. For example, where users are searched by date of message, all users receiving a message on the indicated date would be shown in message display window 276. Message display 25 window 276 can indicate branch code (wire code), advisors, whether the advisor received a copy, user login, user name, user account, message category, etc. In addition, the manager can read and/or delete the messages from the message display window 276. Where a manager desires to reply to a message, they utilize a message reply window similar to that illustrated in 30 FIG. 42. In addition, the reply can be routed to an internal or external system user. It should be appreciated, however, that other features can be made

available to managers and those described herein are not intended to be exhaustive.

CSA interface module 176, shown in FIG. 6, allows CSA's to search users, designate user preferences, view advisor or client user messages. Other 5 features can be made available to CSA's; for example, the capability to edit message templates, etc. FIG. 13 illustrates a client service agent message viewing interface or inbox 278 where CSA's can view either advisor or client user messages by selecting the appropriate indicator on the view selector 280.

Where the CSA seeks to view client user messages, as shown in FIG. 13, they 10 can search for particular client users as described above. Specifically, the CSA can enter search criteria 282 including identification indicators so that a particular client user or user group is identified. In the message viewing window 284, all messages for users matching search criteria 282 are listed. In addition, message viewing window 284 indicates codes, advisors, whether the 15 advisor received a copy, user login, user name, user account, message category, etc. and allows the CSA to read and/or delete specific messages.

As shown in FIG. 14, where the CSA desires to view advisor messages, the advisor indicator of view selector 280 is activated. Particular 20 advisors may be searched by entering advisor search criteria 286 with all advisor messages matching the search criteria 286 listed in message viewing window 284 along with relevant message information (i.e., message status, date of message, etc.). The CSA can read and/or delete the messages individually.

System administration module 174, shown in FIG. 6, allows 25 administrators to edit message templates and send manual messages to advisors or other users. "Manual messages" are those sent independent of a message to a particular user generated by system 10. For example, a manual message can be a message from an administrator to an advisor.

More specifically, system administrator module 174 allows a system 30 administrator to add and/or edit message disclaimers, designate new message types and designate delivery devices, create and/or edit message templates

and send manual messages. FIG. 15 shows a disclaimer interface 288 created by system administrator module 174, where system administrators can edit or add message disclaimers (e.g., legal disclaimers). In adding a disclaimer, the system administrator designates a title in disclaimer title window 290 and manually enters or imports the desired language into disclaimer text window 292 in any known fashion. The disclaimer is then provided to all messages or particular messages to which the disclaimer relates.

FIG. 16 shows a message type creating interface 294, created by system administrator module 174, where new message types can be created or existing message types can be edited. For example, where the system administrator desires to add a new message type, he or she would designate the appropriate type criteria 296 by specifying details such as the message type and category; database 20, 102-110 (where the relevant financial information can be found); the appropriate disclaimer, if any, to accompany the message; the date of creation of the new message type; the frequency in which the message should be delivered; the date on which delivery should commence; and the date on which the delivery of the message should cease. Once type criteria 296 have been designated, device criteria 298 may be specified. By way of example, system 10 will support listed devices 300. Audience selector 302 indicates the users or user groups to which the message type is available, which may be altered using drop down selection boxes. As shown, an internal user 9 creating the new message type can designate one or more user groups that can receive the new message to each delivery device 300. The short format 304, long format 306, advisor format 308 and generic format 310 selectors allows the user creating the message type to indicate the message format available for delivery to each device 300. By selecting

indicator 312, the user can designate the devices and corresponding audiences and formats available for the designated type criteria 296.

FIG. 17 illustrates message template editing interface 304, created by system administrator module 174, which allows internal users 9 to edit and/or 5 create new message templates for particular message topics/types. A new template may include a default reply address 305 which routes recipient replies to a specific user. Once set, the default may be changed by other internal users 9, such as the advisor, as described above. After reply address 305 is selected, appropriate short, long and advisor messages are entered into 10 windows 306, 308 and 310.

Referring back to FIG. 6, a service interface module 180 allows service agents to search users as described in conjunction with FIGS. 8 and 9, and designate user preferences in a manner similar to that explained in conjunction with FIG. 9, as well as any other desired function within the 15 scope of the present invention.

Reporting system 182, shown in FIG. 6, generates and maintains various reports including changes to preferences, enrollment, inbox status, messages delivered, messages types selected, messages touchpointed, touchpoint details, etc. As indicated above, the access to the reports is 20 controlled by security and authentication system 80. This is accomplished in a manner similar to the routing of users to their appropriate interface upon log-in. Specifically, by entering a particular login identification and/or password, security and authentication system 80 allows users to access reports according to pre-determined entitlements or permissions.

25 It should be understood that the interfaces/windows of FIGS. 7-17 and the criteria/fields thereof are shown for illustrative purposes and that each interface/window could include more or fewer features. In addition, it should be understood that the features of each window were discussed in no particular order.

#### D. Message Creation System

System 10 preferably includes a message creation system 320, shown in FIG. 2, for monitoring financial activity and generating and delivering messages to users 8, 9 according to user preferences. As shown in FIG. 18, 5 message creation system 320 includes an identification module 322, a preference examination module 324, and a delivery module 326.

In operation, identification module 322 monitors information stored in system 10 for financial activity. As used herein, "financial activity" may be any event or circumstance relative to the topics of a user 8, 9. By way of 10 example, financial activity may include security orders and status, dividends, interest payments, expiring options, bond swaps, called bonds, maturing securities, research reevaluations, fed calls, equity calls, stock exchange calls, house calls, account balance changes, and the like. Financial activity information is preferably stored in database 20, 102-110, and, as mentioned 15 above, financial activity relative to the financial markets is provided by market feed 21.

Identification module 324 monitors financial activity information for changes and/or activity and identifies which users 8, 9 own or have interest in those topics. By way of example, where a particular option is set to expire 20 within the pre-determined time period, identification module 322 identifies which user(s) 8, 9 own or have an interest in that security. System 10 then transmits a signal to user preference examination module 324, which examines the preferences stored in database 110 to extract the particular 25 preferences for each identified user. Where a user 8, 9 does not designate the expiring options preference at one of the respective preference interfaces, no message is sent to that user. Likewise, where a client user 8 designates expiring options as a preference, but not the particular account that contained the option about to expire, a message would not be sent.

When identification module 322 and preference examination module 30 324 indicate that a message is to be created, delivery module 326 creates the message and delivers to the appropriate users 8, 9. For instance, where a

client user 8 designates expiring options as a preference and the account that contained the particular option, a message is sent via delivery module 326 to client user 8. In addition, a message may be sent to that client user's financial advisor. Actual delivery of messages may be delayed for a certain time so 5 internal users 9 may review client user messages and utilize the system functions described herein. Delivery may also be delayed for compliance review, as described below.

When the message is sent to user 8, 9, it is sent according to the designated preferences. Specifically, the message is delivered in the 10 designated detailed format or summary format to the appropriate electronic mailing address.

It should be remembered that although the message is described herein as being an electronic mailing message, other delivery means may exist. For example, the electronic message can be delivered via telephone, 15 facsimile or wireless device such as a pager or a personal digital assistant (PDA), etc.

#### **E. Compliance Review System**

System 10 preferably includes a compliance review system 330, 20 shown in FIG. 2, for determining compliance of messages with relevant regulations prior to delivery. In one setting, compliance review system 330 preferably provides a user list edit interface, similar to that shown in FIG. 10, that allows a compliance overseer internal user 9 to view and/or edit client user's assigned to receive particular messages or message topics/types. As 25 described above, a user 8, 9 may be "tagged" for non-receipt of the message by the client user list toggle 264 (FIG. 10). In this way, compliance overseer internal users 9 can prevent transmission of information that may be inappropriate relative to legal and regulatory matters.

Of course, as one with skill in the art will recognize, compliance 30 review system 330 may also include a robust filtering system to review messages for particular information that may be inappropriate and provide

delay certain messages for further review.

#### **F. Intervention System**

System 10 also preferably includes an intervention system 340, shown 5 in FIG. 2, for allowing an internal user 9 to intervene relative to client user 8 messages. In particular, intervening system 340 allows an internal user 9, such as a financial advisor, to add to or edit content of a message to a client user prior to delivery. Hence, an internal user 9 may add a personalized note, referred to as "touchpoint," to a client user message. For example, if an 10 advisor wishes to send a client user an exhibit or a personal message along with a message, it would be included as a touchpoint. A "touchpoint" may also include editing of a message created by message creation system 320.

As discussed above relative to FIGS. 7-13, internal users 9 have a variety of modules available for tracking and monitoring messages sent to 15 client users 8 prior to delivery. For instance, various internal users 9 may review client user messages as shown in FIGS. 11, 12 and 14. Each interface shown in FIGS. 7-13 includes a touchpoint selection for accessing touchpoint system 340. Upon activation of the touchpoint selection from any interface of IUI system 90, an internal user 9 may be presented with particular touchpoint 20 interfaces according to their entitlement level as determined by security and authentication system 80. As will be described in more detail below, certain internal users 9 may be presented with different interfaces providing different functionality. For instance, some internal users may be able to create touchpoints, while others may only be able to view touchpoints.

Referring to FIG. 19, an initial internal user touchpoint interface 400 25 is shown. Interface 400 may be presented to any internal user 9 entitled to add touchpoints to client user 8 messages, e.g., a financial advisor, manager, CSA's, etc. At interface 400, an internal user 9 may choose between adding touchpoints to pending messages or future messages at selection 402. In 30 addition, user 9 may search at selection 404 for messages to touchpoint by message category, message template type, client user name, login, account

number, portfolio value/range, etc. Once a search is complete, user 9 is presented with a message list window 406 at which he or she may select particular client user messages or all client user messages to be touchpointed. By activating a create touchpoint selection 408, a user 9 is brought to new 5 touchpoint entry interface 410, as shown in FIG. 20.

Preferably, interface 410 includes a heading for the type of message for which a touchpoint is to be created. For example, FIG. 20 illustrates a touchpoint created for a "pending expiring option" type message. Interface 410 may include message type specific dialogs 412, e.g., an 'Expires on' 10 dialog for delineating time-sensitive touchpoints and a 'Reply to' dialog for indicating where a client user 8 reply should be directed. One with skill in the art will recognize that a variety of different dialogs may be provided for personalization of touchpoints. Interface 410 may also include a 'Salutation' dialog 414 for entering a salutation, e.g., "Hi Joe,"; a message template text 15 window 416 so the user 9 can see what is already in the message, e.g., message template text, disclaimer, etc.; a touchpoint text input window 418 for entering touchpoint text, e.g., "Your option expires 10-01-00. Give me a call."; and a 'Signature' dialog 420 for entering a signature of user 9. By activating 'Submit' button 422, a touchpoint is automatically added to a 20 message. If an internal user 9 selects more than one message for the addition of touchpoints, additional new touchpoint entry interface(s) 410 may be sequentially presented.

FIG. 21 shows a new touchpoint entry interface 424 for future expiring options messages. This interface 424 is identical to interface 410, 25 except that the message text window 416 is not provided because a message has not been created.

Referring to FIG. 22, an internal user 9 may also initiate a view touchpoint interface 426 which provides a list 428 of messages with touchpoints to be sent. List 428 may include, for example, message type, 30 touchpoint text, expiration date, touchpoint creation date, client user name, account number, compliance approval status (e.g., pending rejected, approved,

etc.), and a delete selection. By placing a check in 'Delete?' and activating 'Delete Selected' button 430, a user 9 may delete a touchpoint attached to a message. Alternatively, a user 9 may select a message for editing, e.g., by double-clicking on a message using a mouse.

5 A touchpoint editing interface 432 is shown in FIG. 23. Generally, editing interface 432 re-presents new touchpoint entry interface 410 and allows a user 9 to select, e.g., by pointing and clicking a mouse, the areas of the message to edit. Completion of editing is triggered by activation of 'Submit' button 434. Any number of messages may be edited by returning to  
10 view list 428 and selecting a message for editing.

Marketing interface module 178, shown in FIG. 6, allows marketing agents to obtain and provide information to system users. Special internal user touchpoint interfaces provided to internal users such as marketing agents are illustrated in FIGS. 24-28. FIG. 24 shows a touchpoint entry interface 15 436 at which a touchpoint regarding a new product having relevance to a particular type message, e.g., expiring options, can be entered. Interface 436 includes an 'Expires on' dialog 438 for delineating time-sensitive touchpoints, a touchpoint text entry window 440, an attachment selection 442 for attaching relevant documents, and a 'Submit' button 444. In this instance, a new  
20 product touchpoint would be sent with every future expiring option type message. For example, FIG. 25 shows a new product touchpoint entry interface 446 through which a marketing agent may search messages by category, template type, broker name, financial advisor identification number, wire code, etc. The marketing agent can select from the search results  
25 messages to touchpoint, similarly as described above relative to new touchpoint entry interface 410 (FIG. 19). FIGS. 26 and 27 show a view product touchpoint interface 448 and edit product touchpoint interface 450 for viewing and editing product touchpoints, respectively. Interfaces 448, 450 operate in the same manner as interfaces 426, 432 (FIGS. 22 and 23) discussed above. FIG. 28 shows a touchpoint document attachment interface  
30

452 at which an internal user 9 may attach a document to a touchpoint message in a known fashion.

Intervention system 340 also may include mechanisms to prevent the sending of duplicative touchpoints to a particular client user 8. In addition, 5 although not expressly shown, intervention system 340 may also include precursor selection interfaces so an internal user 9 may select whether to create new touchpoints (FIG. 19), view touchpoints (FIG. 22), edit touchpoints (FIG. 23), and the like in accordance with the procedures described above.

10 Accordingly, intervention system 340 provides a system for internal user(s) 9 to take a proactive approach to client user advising by providing one or more relevant personalized notes to messages that a client user 8 is scheduled to receive. In this way, internal users 9 can better monitor client user 8 information, better advise client users 8 and provide information about 15 new products.

### G. Additional Features

As shown in FIGS. 2 and 29, system 10 may also include additional features 460 such as an online chat system 462, video conferencing system 20 464, and webcasting system 466. On-line chat system 462 may be designated for all or select users and allows them to engage in live chat sessions. Similarly, video conferencing system 464 and webcasting system 466 can also be made available to all or selected users.

### 25 III. Messages

FIGS. 30, 31 and 33-40 illustrate messages in accordance with a first preferred embodiment of the invention. FIG. 32 illustrates a first embodiment of a client user message viewing window, or inbox, and FIGS. 41 and 42 illustrate a client inbox and a message reply window in accordance with a 30 second preferred embodiment of the present invention. Internal user inboxes were described above relative to FIG. 11.

At the outset of the discussion of exemplary messages, it should be understood that messages may be delivered to both client users 8 and internal users 9. Accordingly, the description that follows refers to simply 'users' except where a differentiation is necessary.

FIGS. 30 and 31 illustrate an electronic message delivered to users 8, 9 in summary format. As depicted first in FIG. 30, a summary message 72 entitled Trade Activity 73 includes an indication of message topic 74 (i.e., order status 76) that is available in a users' inbox 92 shown in FIG. 32. A hypertext link 78 is also provided to give direct access to messaging system 10 for users 8. By clicking on hypertext link 78, the user can be brought either to an initial system interface or directly to the relevant inbox. Messages are stored in a client user's inbox as well as any internal user's inbox (FIG. 11), e.g., a financial advisor's inbox, or both. Textual material such as legal disclaimer 80 may also be included in the summary message 72.

FIG. 31 shows a similar summary message 82 entitled Trade Activity 84. This message includes topical indicator 85, message topics 86, hyperlink 88 and textual material 90, which indicates a message availability deadline. However, this message includes different message topics 86 than the summary message 72 of FIG. 30. Advantageously, the flexibility of system 10 provides updated messages to users in a fast, streamline and efficient manner. There is no predetermined minimum number of updates that must occur prior to the generation and delivery of a message. That is to say, a message is delivered concomitantly with topic updates. This provides users with the most current, up to date information.

FIG. 32 shows one example of inbox 92 containing updates generated and delivered by system 10. Inbox 92 preferably includes message quantity indicator 94 and a topic list 98 of the updates stored in inbox 92. To access a particular update, a user will preferably click on icon 96 adjacent thereto. Preferably, the updates are stored within inbox 94 in descending date order so that the most current update is first. It should be understood, however, that

other embodiments of inbox 92 exist. For example, the updates could be stored by message and not in descending date order.

FIG. 33 lists the financial security status messages available. Referring more specifically to FIG. 34, the detailed message for research 5 reevaluation 108 is illustrated. This attachment presents the user with a detailed description of the particular securities that received new ratings. As can be seen, the user is presented with an itemized list 113 of the securities with new ratings. In the example shown in FIG. 34, the security rating for DOW was altered downward from "attractive" to "neutral." In addition to the 10 indication of rating change, list 113 can include other features of the security such as the full research report, closing market value, quantity, etc. as well as textual material such as legal disclaimer 115.

FIGS. 35-38 show examples of the remaining messages referenced in message list 100. Specifically, Fig 35 shows the detailed message for 15 expiring options 110, FIG. 36 shows the detailed message for called bonds 119, FIG. 37 shows the detailed message for maturing securities 117 and FIG. 38 shows the detailed message for trading alerts 121. The descriptions in FIGS. 35-38 provide the user with all relevant and updated information. For example, the description in FIG. 35 indicates that the CIK options in a user's 20 portfolio are due to expire in the next two weeks. The message also provides the user with additional information relating to the security (e.g., quantity, expiration date, strike price, etc.).

Similarly, the description of FIG. 36 provides that the B44YY6 bond in a user's portfolio will be called within the next two weeks. The description 25 of FIG. 37 provides that the E37KV0 bond in the user's portfolio will be maturing in the next two weeks. FIG. 38 describes that an order to sell 500 shares of AOL at market price in user's account no. AB 22343 has been placed and assigned order number AB 1000. As indicated, each description can also 30 provide a user with additional details about the securities (e.g., S&P rate, interest rate, textual material, etc.).

FIGS. 39 and 40 describe order status 121 descriptions. In particular,

message 122 contains information explaining the possible outcomes of order status. As depicted, message 122 includes a description/list of possible outcomes 124, definitions 126, delivery criteria 128 for the message, a summary of the order status 130 and a detailed description of the order status 132. For example, if a client user's order status is "open," the definition 126 pertaining thereto is given as "a buy or sell that has not been executed," and the message is scheduled for immediate delivery. Likewise, detailed description 132 indicates that the order to sell 500 shares of AOL at market day in account no. AD 22343 has been placed and assigned order no. AB 1000 (as indicated in detailed message 120). As is known to those of ordinary skill in the art, the status of an order can be executed, partially executed or cancelled. It should be understood that the message of FIGS. 39 and 40 need not be delivered with each order status message; instead, the message 122 may be delivered upon request by a user, delivered periodically, or accessible through the user's inbox in a manner similar to the summary messages.

FIG. 41 shows a client user message viewing window or inbox 164 in accordance with a second embodiment. Here, the user can read old messages and/or the details of messages received in summary or generic format. In this instance, inbox 164 includes message status indicator 166 advising the user if the message is read or unread; date indicator 168 indicating the date the message was sent and/or received; account number indicator 170 indicating the client user account to which the financial message pertains; subject indicator 172 specifying the message type; message summary 174 briefly indicating the contents of the message; delete function 176 allowing the user to delete any messages; and reply buttons 180 allowing the user to reply to a message. In the event a client user 8 elects to reply to the message, a user message reply window 182, shown in FIG. 42, having an area 184 in which to type comments is provided. The reply can be routed to a specified user as denoted in 'Reply to' dialogs, discussed above relative to FIGS. 17, 20, 21, 23. For instance, a reply may be sent to the user's advisor. Replies can be used to communicate with internal users for customer service purposes, or any

other purpose not listed herein.

#### IV. Method

Referring to FIG. 43, a flowchart of a method for delivering a financial message to a client user in accordance with the invention is shown. At step S1, client user message preferences are gathered from the client user using, for example, registration system 30 as described above. Of course, client user message preferences may also be obtained in other manners such as manual questioning. The step of gathering client user message preferences may also include an internal user 9 designation of client user 8 message preferences, as described above.

At step S2, a client user message is created in accordance with the client user message preferences. This step may be provided, for example, by a message creation system 320, as discussed above. Preferably, this step includes monitoring of financial activity and preparation of a client user message regarding the financial activity.

At step S3, a personalized note, or touchpoint, from an internal user 9 may be added to a client user 8 message prior to delivery. This step is provided by intervention system 340, as described above.

At step S4, an optional review of messages prior to delivery for compliance with regulations may be provided. This step may be provided, as explained above, by compliance review system 330

At step S5, the financial message is delivered with the personalized note to the client user.

Having thus described the invention in rather full detail, it will be understood that such detail need not be strictly adhered to but that various changes, modifications may suggest themselves to one skilled in the art, all falling within the scope of the present invention as defined by the subjoined claims.

**CLAIMS**

What is claimed is:

1. A system for delivering a financial message to a client user regarding financial activity, comprising:

5 a registration system configured to register a client user and determine the messages received by the client user;

a message creation system configured to monitor financial activity, create messages as requested by the client user regarding the activity and deliver messages; and

10 an intervention system configured to allow an internal user of the system to add to or edit content of a message to a client user prior to delivery.

2. The system as recited by claim 1, wherein the registration system includes a registration interface module configured to create a client user preference designation interface to determine the messages received by the client user.

3. The system as recited by claim 1, further comprising a client user message inbox for viewing a client user message.

20 4. The system as recited by claim 1, wherein the system is accessible by the client user from an online financial transaction forum.

5. The system as recited by claim 1, further comprising an 25 internal user interface system.

6. The system as recited by claim 5, wherein the internal user interface system includes a financial advisor interface module configured to create:

30 an advisor client user preference designation interface for designating client user preferences;

an advisor preference interface for designating advisor message preferences; and

an advisor message inbox for viewing client user or advisor messages.

5        7.      The system as recited by claim 5, further comprising a client user searching mechanism.

10       8.      The system as recited by claim 5, further comprising a reporting system for generating reports.

10       9.      The system as recited by claim 5, further comprising a user list edit interface which prevents delivery of a message to the client user.

15       10.     The system as recited by claim 5, further comprising a manager user message viewing interface.

11.     The system as recited by claim 5, further comprising a client service agent interface including a message viewing interface.

20       12.     The system as recited by claim 5, further comprising a marketing interface including a disclaimer interface, a message type creating interface and a message template editing interface.

25       13.     The system as recited by claim 1, further comprising a market feed for supplying market data.

14.     The system as recited by claim 1, further comprising a security and authentication system configured to control access to and within the system.

15. The system as recited by claim 1, further comprising at least one of an on-line chat system, a video conferencing system and a webcasting system.

5 16. The system as recited by claim 1, wherein the messages are deliverable via electronic mail, facsimile, telephone, or wireless device.

17. An internal user interface system for an internal user of a financial message delivery system, the interface system comprising:

10 means for designating internal user message preferences;  
means for designating client user message preferences;  
means for viewing client user or internal user messages;  
means for replying to client user messages;  
means for creating messages; and  
15 means for searching for messages for a client user.

18. A method for delivering a financial message to a client user, comprising the steps of:

20 gathering client user message preferences from the client user;  
creating a client user message in accordance with the client user message preferences;  
adding a personalized note from an internal user to a client user message prior to delivery;  
and  
25 delivering the message with the personalized note to the client user.

19. The method as recited by claim 18, wherein the step of gathering client user message preferences includes an internal user designation of the client user message preferences.

20. The method as recited by claim 18, wherein the step of creating a client user message includes the steps of monitoring financial activity and preparing a client user message regarding the financial activity.

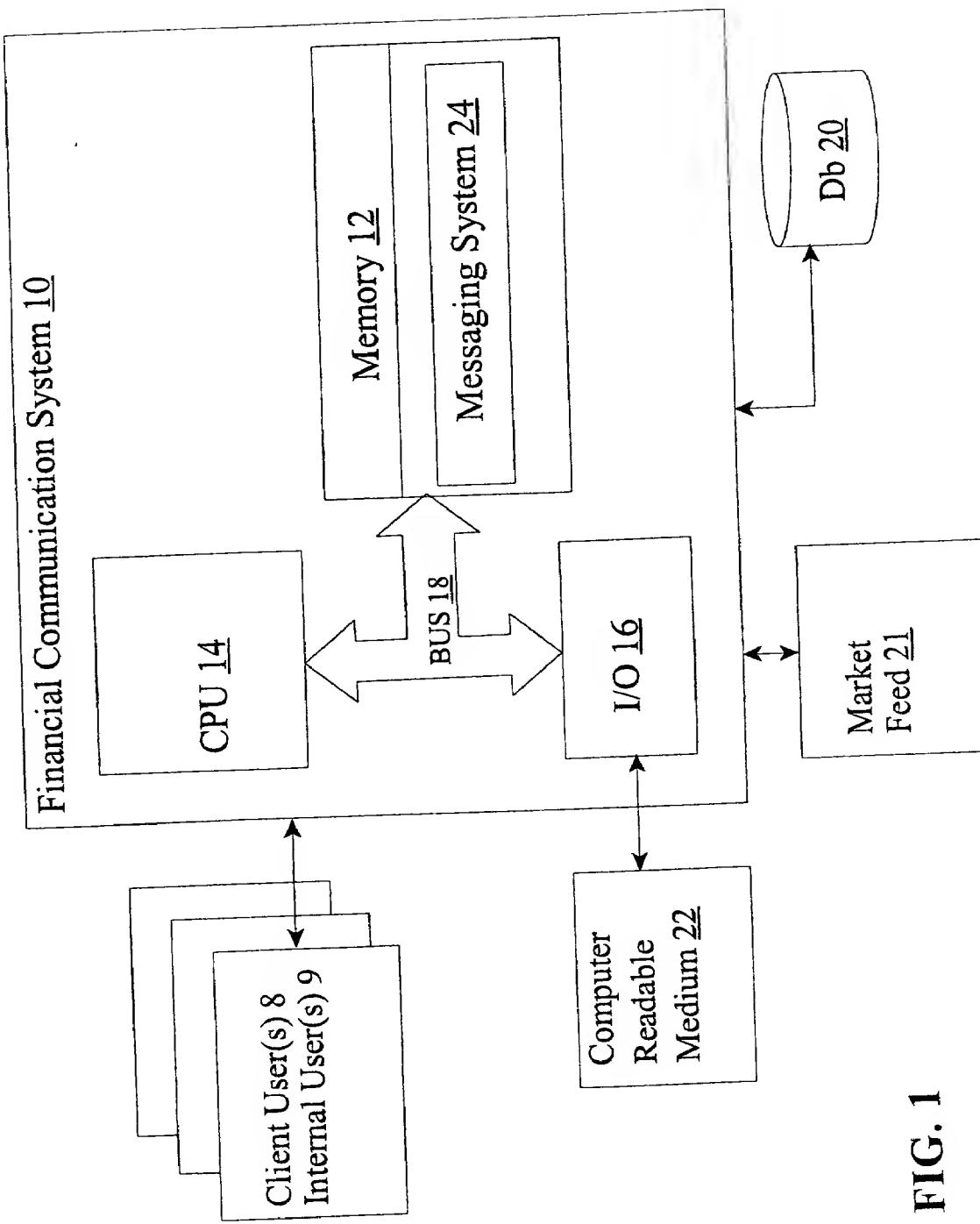
5 21. The method as recited by claim 18, further comprising the step of reviewing messages prior to delivery for regulatory compliance.

**ABSTRACT**

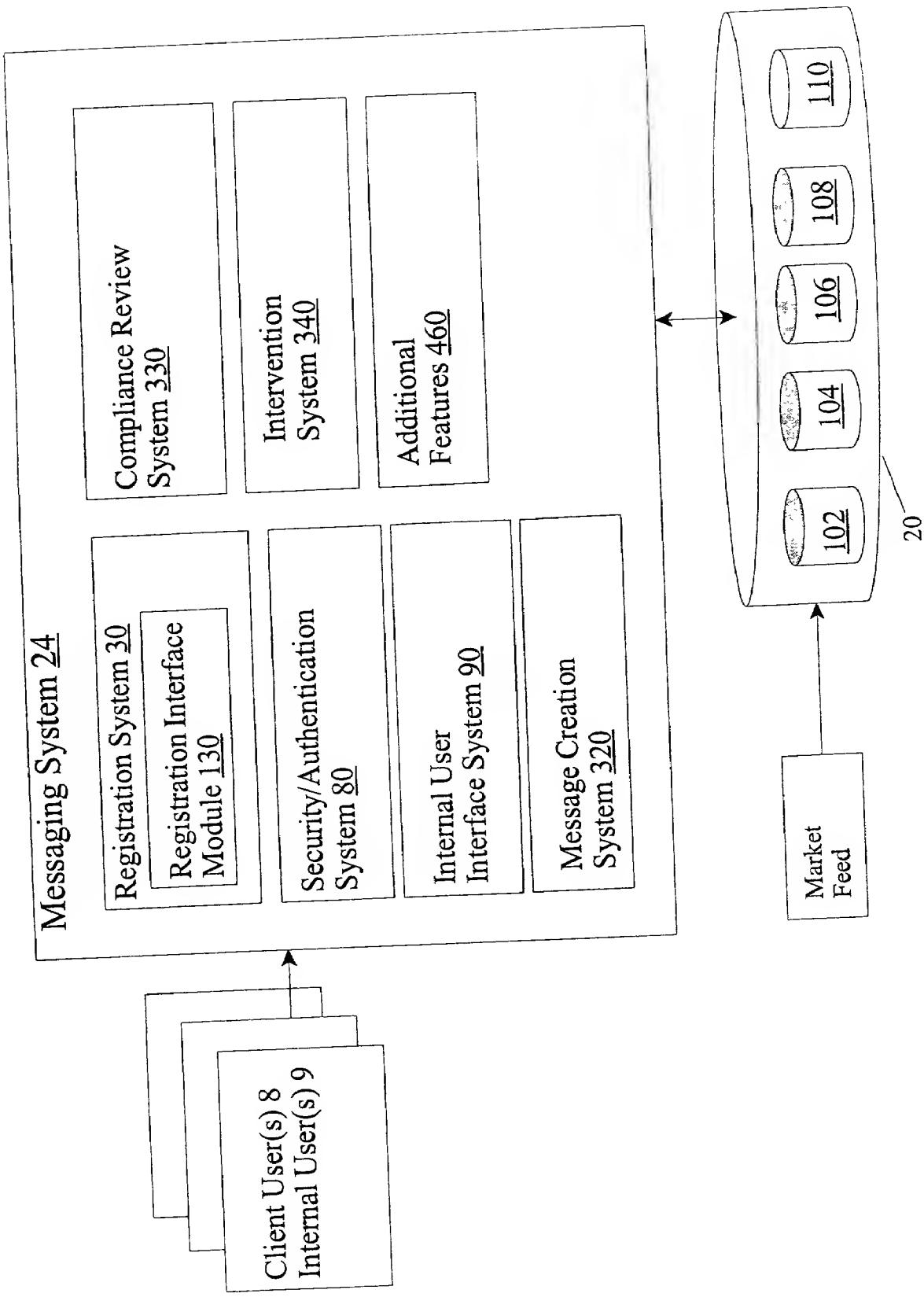
Systems and a method for delivering a financial message. The system for delivering a financial message includes, inter alia, an intervention system configured to allow an internal user of the system to add or edit content of a message to a client user prior to delivery. Advantageously, financial advisors and other internal users have the ability to interact with a client user to provide proactive financial advice.

10

2949181.01



**FIG. 1**



**FIG. 2**

ELIGIBLE ACCOUNTS:

AB1234	YES <input type="checkbox"/>	NO <input type="checkbox"/>
AB3456	YES <input type="checkbox"/>	NO <input type="checkbox"/>
AB4567	YES <input type="checkbox"/>	NO <input type="checkbox"/>

34  
35  
36  
37  
38  
39  
3A  
3B  
3C  
3D  
3E  
3F  
3G  
3H  
3I  
3J  
3K  
3L  
3M  
3N  
3O  
3P  
3Q  
3R  
3S  
3T  
3U  
3V  
3W  
3X  
3Y  
3Z

DELIVERY OPTIONS:

42	DETAILED MESSAGE <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>
44	NOTIFICATION ONLY (VIEW MESSAGES WITHIN SYSTEM) <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>

46  
47  
48  
49  
4A  
4B  
4C  
4D  
4E  
4F  
4G  
4H  
4I  
4J  
4K  
4L  
4M  
4N  
4O  
4P  
4Q  
4R  
4S  
4T  
4U  
4V  
4W  
4X  
4Y  
4Z

EMAIL ADDRESS

50

EMAIL ADDRESS <input type="text"/>
---------------------------------------

**FIG. 3**

3 / →

Messages: 31

54

56

58

70

52

	Yes	No
1) On-line Trading Order Status (Any status change to your on-line orders)	<input type="checkbox"/>	<input type="checkbox"/>
2) Research Reevaluation (Any securities in your portfolio that have received new ratings from the PaineWebber's Equity Research Department)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Expiring Options (Any options in your portfolio due to expire)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Maturing Bonds (Any bonds in your portfolio due to mature)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Called Bonds (Any bonds subject to a full or partial call)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Research—Highlighted Stocks List	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7) Research—Focus List Recap	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PaineWebber's *Highlighted Stocks* list presents investors with a choice group of companies from the core investment themes that our Strategy Group identifies. Subscribe here for monthly updates that include core investment themes, the stocks that fit those themes and performance of the List versus the S&P 500.

64

The Focus List is a list of up to 30 stocks, all rated "Buy" or "Attractive", that are selected by a committee of investment professionals. The Focus List employs a proprietary stop-loss mechanism designed to minimize risk. Subscribe here for updates after the committee's weekly meetings.

66

FIG. 4

131

**E-let** **PaineWebber E-lets Prototype**

Your E-let Index Your E-let Preferences

**Your Preference Setup**

Delivery Device Type: Email — 142   Delivery Device: Work Email — 144   Email/Phone Number: joe@pw.com — 146

Optional, do not deliver E-lets from [ ] to [ ] — 147

Add Device — 148

Here are the delivery devices that you have configured — 150

Delivery Device	Email/Phone Number	Enabled?	Delete?
Work Email	joe@pw.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Home Phone	212-333-5212	<input checked="" type="checkbox"/>	<input type="checkbox"/>

E-let Category: Trading Related — 152   E-let Type: Expiring Options — 154   Delivery Device: Work Email — 156   Format: Generic — 158

Add E-let — 160   Create Custom E-lets — 162

Here are the E-lets have chosen to receive — 165

E-let Category	E-let Type	Delivery Device	Format	Enabled?	Delete?
Trading	Execution	my Pager	Short	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Portfolio	Expiring Options	Work Email	Long	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit

FIG. 5

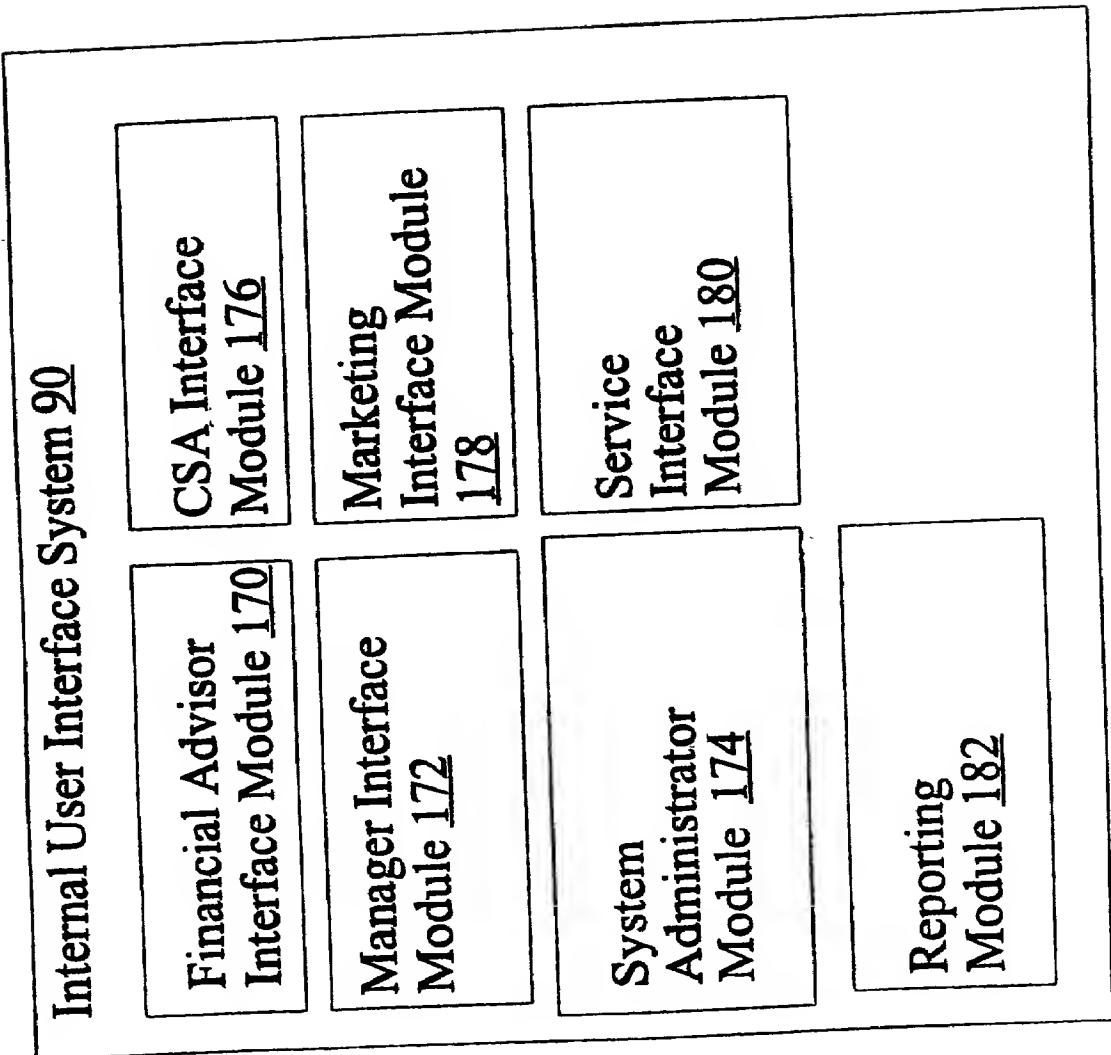


FIG. 6

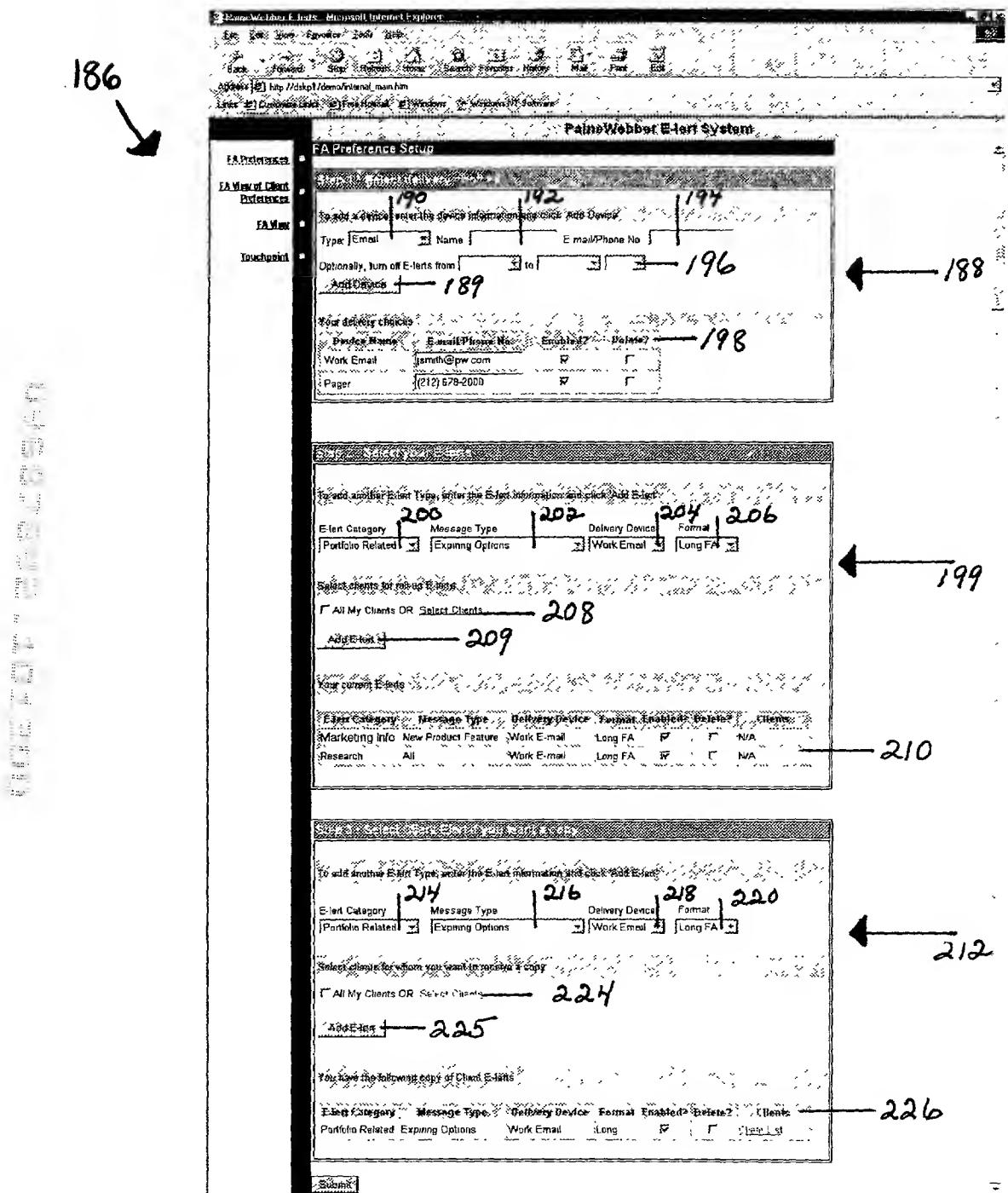


FIG. 7

191

↓

**PaineWebber E-lert System**

**Search Clients**

Client Name	Account Number	EDGE Login	Portfolio Value
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> to <input type="text"/> 200000
<b>193</b>			
<input type="button" value="Search"/>			
Clients that have signed up for one type of E-lert will be automatically included in this rolling E-lert in addition to the clients you have selected below.			
<b>Client Name</b>	<b>Account Number</b>	<b>EDGE Login</b>	<b>Portfolio Value</b>
Joe Smith	AB1111	JSmith	\$50,000
Nikki Martin	AB2222	NMartin	\$20,000
Jim Schmitz	AB3333	JSchmitz	\$30,000
<input type="checkbox"/> Select <b>195</b>			
<input type="button" value="Done"/>			

**FIG. 8**

228

<http://diskpt1/intelnet/main.htm> - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History

Address: <http://diskpt1/intelnet/main.htm>

Title: Comdex Take 2.0 Beta Test - Windows NT Software

PaineWebber E-Lert System

FA Preferences

FA View of Client Preferences

Client Name: Joe Account Number: S1 to S1

Management View

E-Lert Maintenance

Touchpoint

Registration and Login

FA View of Client Preferences

Client Name: Joe Account Number: S1 to S1

EDGE Login: S1 Portfolio Value: \$1

Client Name: Joe Smith Account Number: PT 38980 EDGE Login: JSmith Portfolio Value: \$60,000,000

Client Name: Joe Martin Account Number: AB 63209 EDGE Login: JMartin Portfolio Value: \$32,000,000

Client Name: Joe Schmitz Account Number: CY 47934 EDGE Login: JSchmitz Portfolio Value: \$23,000,000

State Preferences:

- Show Performance
- Show Outcomes
- Show Responses

Add new delivery method for this client

To add a delivery method, enter the details and click "Add Device".

Delivery Device Type: **235** Delivery Device: **238** Email/Phone Number: **240**

Email **236** Work Email **239** joe@pw.com

Optional, do not deliver E-lets from:

Add Device: **241**

Please enter the contact details for this client.

Delivery Device: Email/Phone Number: Enabled: Delays:

Work Email: joe@pw.com   **246**

Home Phone: 212-333-6212

Step 3: Review E-let preferences

To add preferred E-let type, enter the E-let information and click "Add E-let".

E-Lert Category: Trading Related	E-Let Type: Expiring Options	Delivery Device: Work Email	Format: Generic
----------------------------------	------------------------------	-----------------------------	-----------------

**248** **250** **252** **254**

Please note the E-lets the Client has chosen to receive.

E-Lert Category: Trading	E-Let Type: Execution	Delivery Device: Short	Enabled: Delays:
Portfolio	Expiring options	Long	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

**256** **247**

To review Custom E-lets for this client, click on the link below.

Client has setup Custom E-lets **258**

Review Custom E-lets for this Client

Reply to: Me (Client's FA) **260**

**232** **230** **234** **242** **235** **244** **246** **248** **250** **252** **254** **256** **247**

FIG. 9

262



http://dskp1/demo/internal\_main.htm - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites History Mail Print Exit

Address http://dskp1/demo/internal\_main.htm

Links Customer Links Favorites Favorites Help

PaineWebber E-Alert System

Client List for Expiring Options E-alerts

FA Preferences

FA View of Client Preferences

FA View

Touchpoint

Client Name Account Number ERCEI Logon Portfolio Value (Dollars)

Walt Whitman	AB1111	WWhtman	\$250,000	<input type="checkbox"/>
Stephen King	AB2222	SKing	\$100,000	<input checked="" type="checkbox"/>
Ralph Emerson	AB3333	REmerson	\$150,000	<input type="checkbox"/>

264

Delete Selected

Done

Local Internet

The screenshot displays a client list for expiring options e-alerts. The table contains the following data:

Client Name	Account Number	ERCEI Logon	Portfolio Value (Dollars)	Action
Walt Whitman	AB1111	WWhtman	\$250,000	<input type="checkbox"/>
Stephen King	AB2222	SKing	\$100,000	<input checked="" type="checkbox"/>
Ralph Emerson	AB3333	REmerson	\$150,000	<input type="checkbox"/>

FIG. 10

266



PaineWebber E-Alert - Microsoft Internet Explorer Provided by Sapient New York

File Edit View Go Favorites Help Stop Refresh Home Search Favorites History Chatbox Publisher Mail Print Links

Http://ddkpi/internal\_main.htm

PaineWebber E-Alert System

FA Preferences

FA View of Client Preferences

FA View

Management View

E-Alert Count 2

E-Alert Maintenance

Touchpoint

Registration and Login

FA View

My E-alerts C My Clients' E-alerts

To sort the result set, click on any of the column headers.

Message

Subject

Date

Status

E-alert

Category

10/12/1999 Portfolio Expiring Options The following options of your

10/12/1999 Product Info New Product Feature Marketing Technology annou

Delete?

Delete Selected

268

270

FIG. 11

272



272

PaineWebber E-Alert - Microsoft Internet Explorer provided by Capient New York

File Edit View Insert Favorites Help  
Stop Refresh Home Search Forward History Channels Publish Mail

Address: [2] http://disk1/internal\_main.htm

PaineWebber E-Alert Systems

Branch View of Client E-Alerts

Search

Wire Code FA FA got a Date copy ED&E Login Client Name Account Number E-Alert Category Subject

10/5/99 274

Search

E-Alert Count 6

Wire Code	FA	Date	EP/E	Client Name	Account Number	E-Alert Category	Subject	Message	Delete?
PW02_FA1	<input checked="" type="checkbox"/>	10/5/1999	JWoods	Joe Woods	PT 52382	Portfolio	Closing Balance	The Closing Balance of your	<input type="checkbox"/>
PW02_FA2	<input checked="" type="checkbox"/>	10/5/1999	TWoods	Tiger Woods	PT 52382	Portfolio	Expiring Options	Your 100 options of IBM at \$50	<input type="checkbox"/>
PW02_FA3	<input checked="" type="checkbox"/>	10/5/1999	BSmith	Bob Smith	PT 52381	Trading	Busted	Your order to BUY 500 T at MKT	<input type="checkbox"/>
PW02_FA4	<input checked="" type="checkbox"/>	10/5/1999	BSmith	Bob Smith	PT 52341	Trading	Open	Your order to BUY 200 EXDS at \$5 3/8 LMT	<input type="checkbox"/>
EPW02_FA5	<input checked="" type="checkbox"/>	10/5/1999	MStanley	Mike Stanley	PT 50381	Portfolio	Executed	Your order to BUY 500 LEH at MKT	<input type="checkbox"/>
PW02_FA6	<input checked="" type="checkbox"/>	10/5/1999	JDoe	John Doe	PT 52360	Trading	Open	An order to SELL 500 at MKT	<input type="checkbox"/>

Delete Selected

274

276

FIG. 12

278



2 PaineWebber E-Alert - Microsoft Internet Explorer provided by Sapient New York  
File Edit View Go Favorites Help  
Back Forward Stop Search Favorites History Channel Published Mail Print Help  
Address http://diskp1/internal\_main.htm  
**PaineWebber E-Alert System**

**CSA View of Client E-Alerts**

Search Client E-Alert View E-Alerts

FA E-Alerts  FA Client's E-Alerts ————— 280

**FA View**

**Management View**

**E-Alert Maintenance**

**Touchpoint**

**Registration and Login**

**E-Alert Count: 4**

Wire Code	FA	Date	EDGE Login	Client Name	Account Number	E-Alert Category	Subject	Message	Delete?
FA1	<input checked="" type="checkbox"/>	10/05/00	LWoods	Lis Woods	PT 52302	Portfolio	Closing Balance	The Closing Balance of your	<input type="checkbox"/>
FA2	<input checked="" type="checkbox"/>	10/05/00	TWoods	Tiger Woods	PT 52302	Portfolio	Exploding Options	Your 100 options of IBM at \$50	<input type="checkbox"/>
FA1	<input checked="" type="checkbox"/>	10/05/00	BSmith	Bob Smith	PT 52301	Trading	Busted	Your order to BUY 500 T at MKT	<input type="checkbox"/>
FA2	<input checked="" type="checkbox"/>	10/05/00	JDoe	John Doe	PT 52300	Marketing Info	Open	An order to SELL 500 at MKT	<input type="checkbox"/>

**282**

**284**

A screenshot of a web-based application titled "PaineWebber E-Alert System". The main page is titled "CSA View of Client E-Alerts". It features a search bar and two radio button options: "FA E-Alerts" (unchecked) and "FA Client's E-Alerts" (checked). Below this is a table titled "E-Alert Count: 4" containing four rows of data. Each row includes fields for Wire Code, FA status, Date, EDGE Login, Client Name, Account Number, E-Alert Category, Subject, and a Delete checkbox. The subjects and messages in the table correspond to the handwritten notes above. Handwritten numbers 278, 280, 282, and 284 are placed near the top of the screenshot, the radio button, and the bottom right of the table respectively.

FIG. 13

278



PaineWebber E-Jert - Microsoft Internet Explorer provided by Sagent New York

File Edit View Insert Favorites Help

Address http://disk1/internal\_main.htm

PaineWebber E-Jert System

CSA View of FA E-Jerts

FA Preferences

FA View of Client Preferences

FA View

Management View

E-Jert Maintenance

Touchpoint

Registration and Login

FA E-Jerts FA Client's E-Jerts 280

Wire Code FA

286

Result Count: 2

Status Date Subject Message Delete?

10/12/1999 Portfolio Expiring Options The following options of your

10/12/1999 Product Info New Product Feature Marketing Technology annou

284

Delete Selected

FIG. 14

288

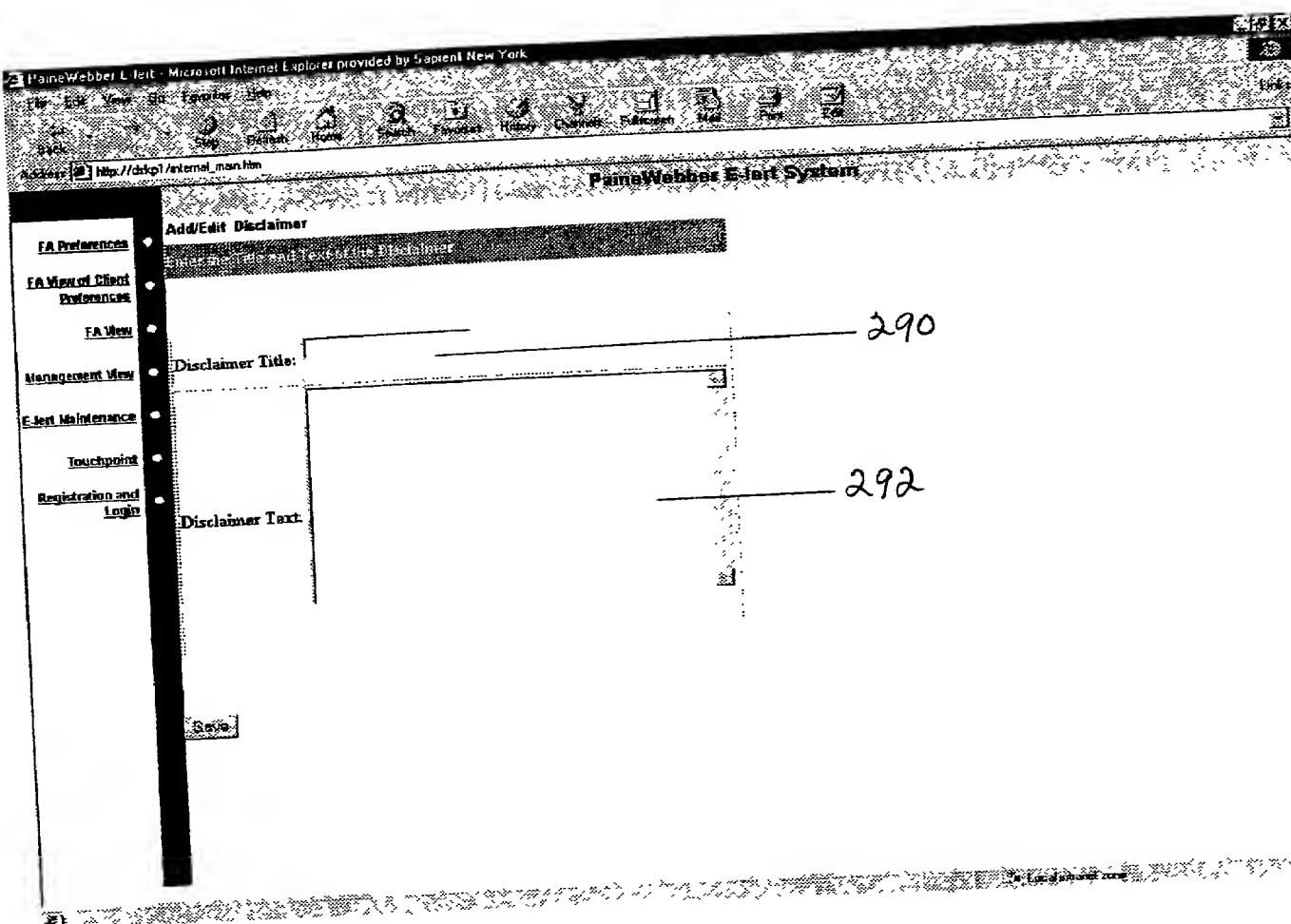


FIG. 15

294

↓

**PaineWebber E-Jert - Microsoft Internet Explorer provided by Capient New York**

[File](#) [Edit](#) [View](#) [Go](#) [Favorites](#) [Help](#)

[Back](#) [Forward](#) [Home](#) [Search](#) [Favorites](#) [History](#) [Character](#) [Favorites](#) [Mail](#)

Address  Status

**PaineWebber E-Jert System**

**Add Message Type**

<b>FA Preferences</b>	<b>Message Type :</b> Closing Balance	<b>Frequency :</b> Daily
<b>FA View of Client Preferences</b>	<b>Category :</b> Trade Related	<b>Deliver Starting :</b> 28-Sep-1999
<b>FA View</b>	<b>Date Source :</b> Transaction DB	<b>Valid Until :</b> 31-Dec-1999
<b>Management View</b>	<b>Disclaimer:</b> Disclaimer 1	
<b>E-mail Maintenance</b>	<b>Date Created :</b> 28-Sep-1999	
<b>Touchpoints</b>		
<b>Registration and Login</b>		

**304**

**306**      **308**      **310**      **312**

**296** ←

**298** ←

Device	Condition	Format	Label	Temp F/A	Comments	Select?
Email	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Email Inbox	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ConsultNet	FA only	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Paper	FA, CSA & Clients	P	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Palm Pilot	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other PDA	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fax	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Phone	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Instant Messaging	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network Printer	FA, CSA & Clients	F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**300**

**302**

[Create E-Jert Template](#)

**FIG. 16**

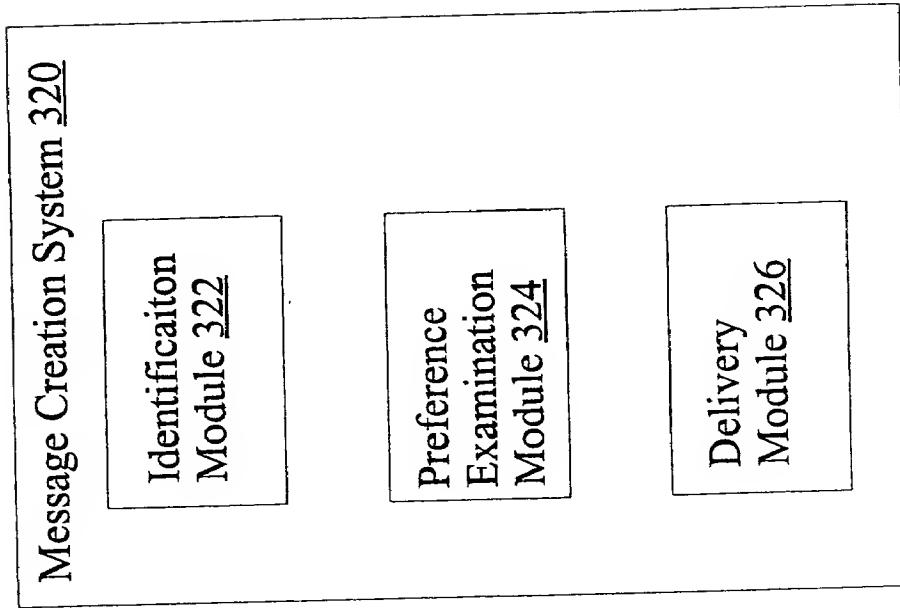
304

↓

PaineWebber E-List Microsoft Internet Explorer  
File Edit View Favorites Tools Help  
PaineWebber E-List System  
Create E-List Template  
Reply To: CSA 305  
Short Description 306  
Step 2: Enter the short description contents from the template  
Long Description 308  
Step 3: Enter the long description contents from the template  
Long FA Description 310  
View Column List  
Submit

FIG. 17

**FIG. 18**



400

402

404

406

408

PaineWebber E-Alert System

Add Touchpoint to E-alerts

Attach touchpoint to pending e-alert       Attach touchpoint to a future e-alert

E-Alert Category	E-Alert Type Template	Date	Client Name	EDGE Login	Account Number	Portfolio Value
					\$	to \$

Search

E-Alert Count: 2

E-Alert Category	E-Alert Type Template	Date	Client Name	EDGE Login	Account Number	Portfolio Value
Portfolio Related	Closing Options	9/29/1999	Phil Hsu	phsu	AB11111	\$60,000
Portfolio Related	Closing Balance	10/2/1999	Jim Schmitz	schmitz	AB22222	\$20,000

Select All   Unselect All

Create Touchpoint

FIG. 19

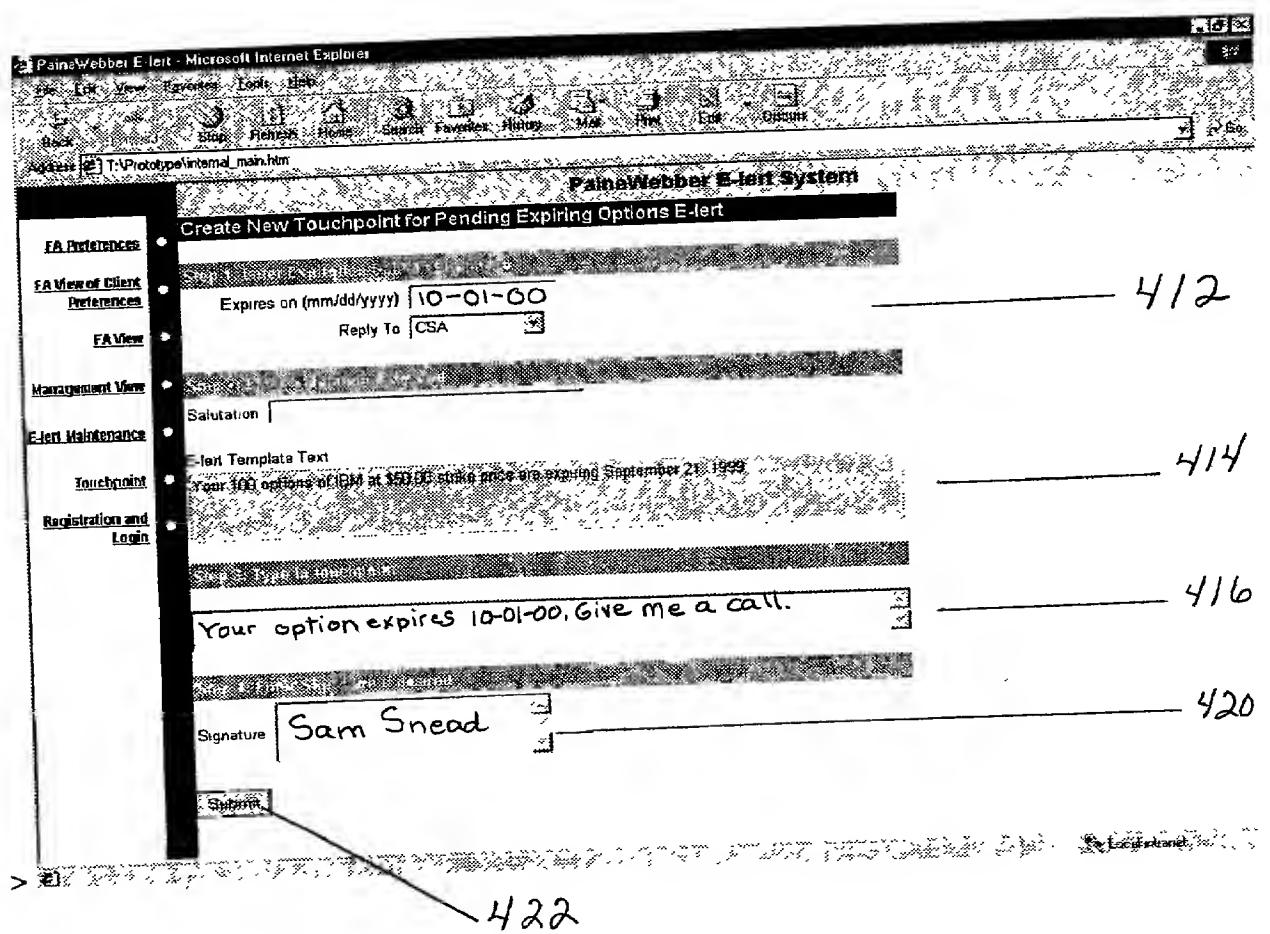


FIG. 20

424

↓

**PaineWebber E-Alert - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address: T:\Prototypes\internal\_main.htm

**PaineWebber E-Alert System**

Create New Touchpoint for Future Expiring Options E-Alert

FA Preferences  
FA View of Client Preferences  
FA View  
Management View  
E-Alert Maintenance  
Touchpoint  
Registration and Login

Expires on (mm/dd/yyyy) \_\_\_\_\_  
Reply To CSA

Salutation \_\_\_\_\_

Signature \_\_\_\_\_

Submit

Done

This figure shows a screenshot of a Microsoft Internet Explorer browser window displaying the PaineWebber E-Alert System. The main content area is a form titled 'Create New Touchpoint for Future Expiring Options E-Alert'. The form includes fields for 'Expires on (mm/dd/yyyy)', 'Reply To' (set to 'CSA'), 'Salutation', and a 'Signature' field. A 'Submit' button is at the bottom. On the left, a sidebar lists various menu items: 'FA Preferences', 'FA View of Client Preferences', 'FA View', 'Management View', 'E-Alert Maintenance', 'Touchpoint', and 'Registration and Login'. A handwritten arrow points from the number 424 at the top right towards the screenshot.

**FIG. 21**

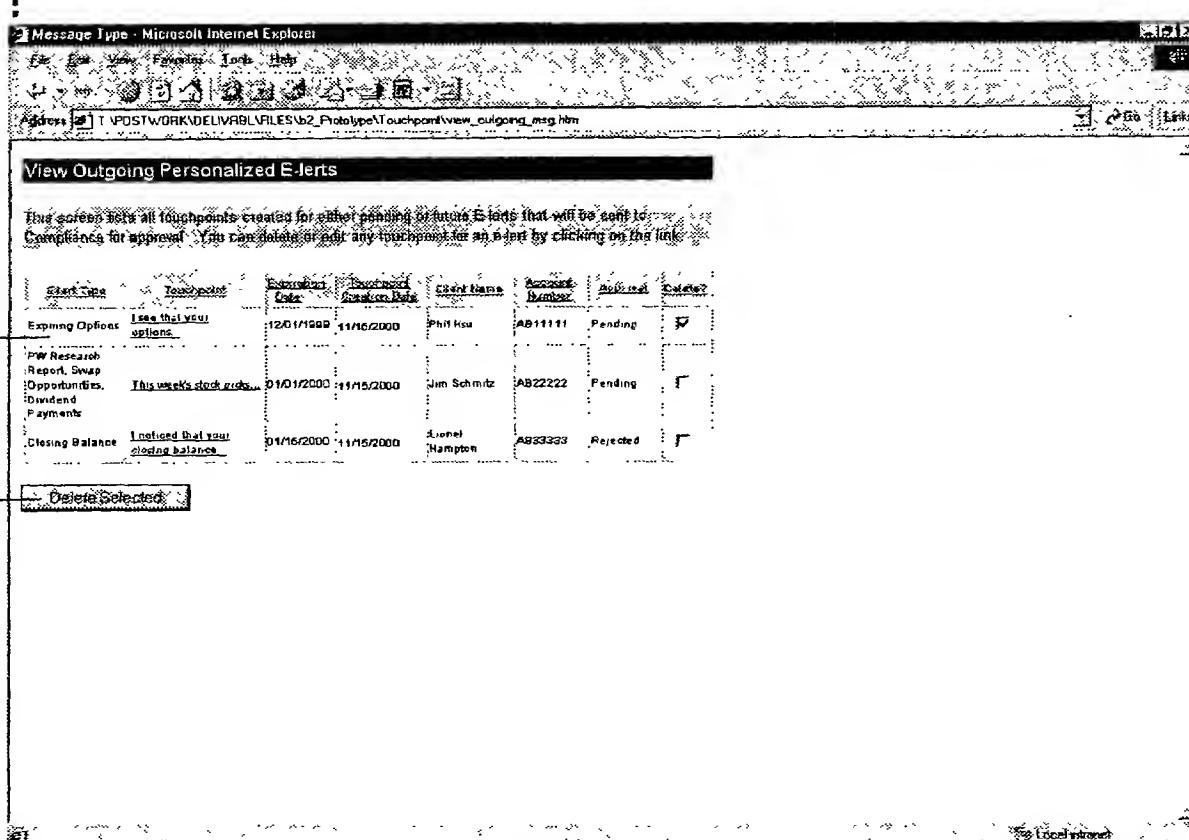
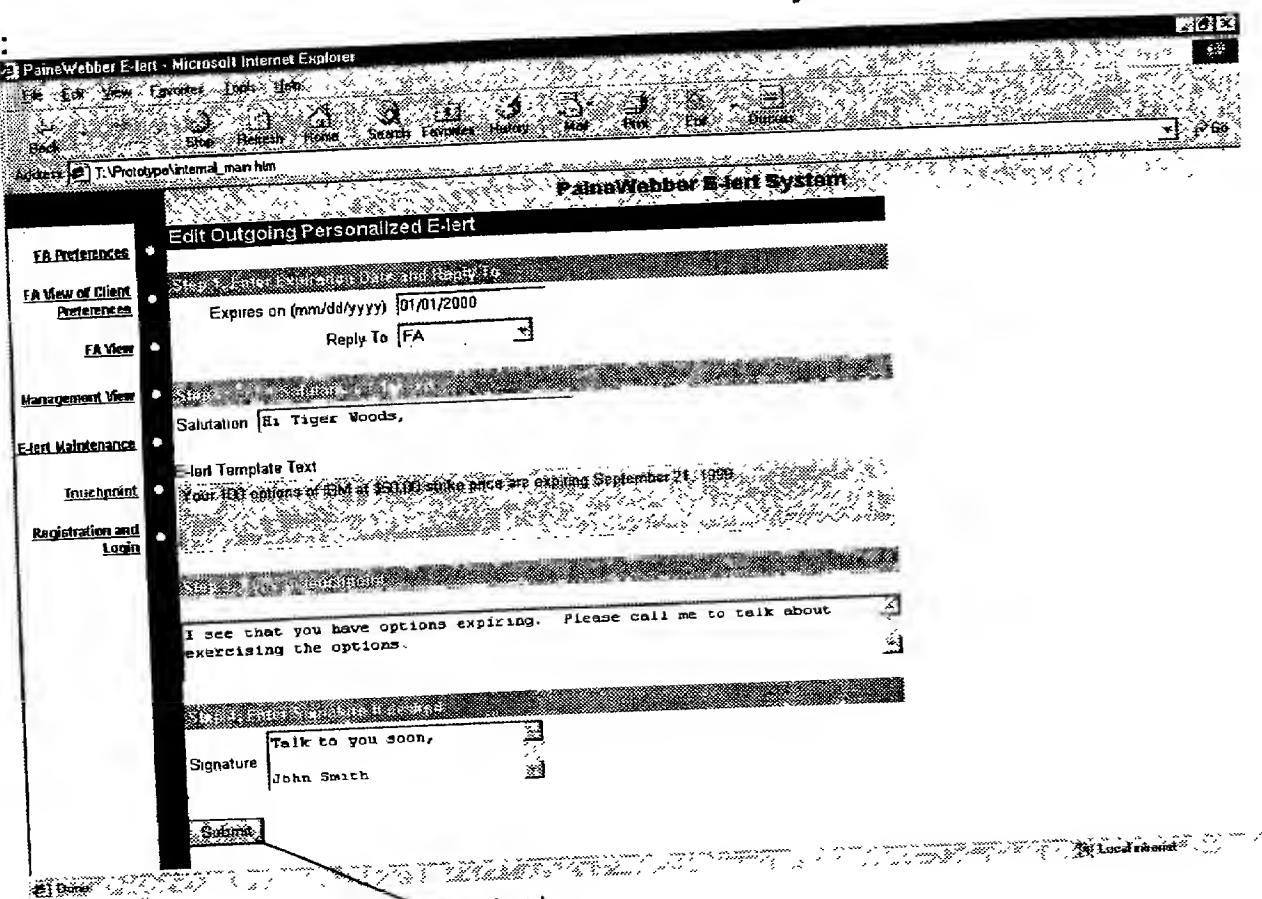


FIG. 22



434

FIG. 23

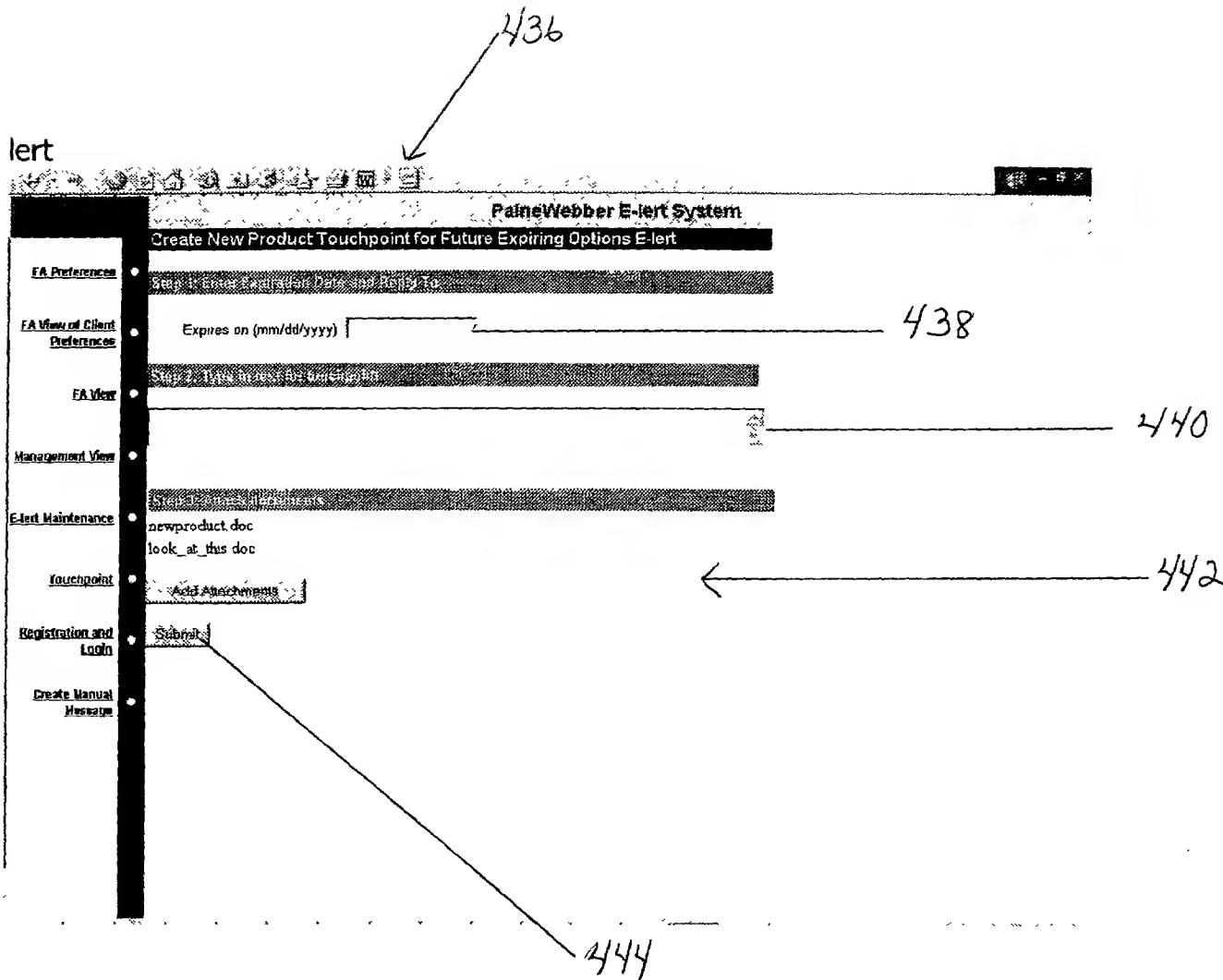


FIG. 24

446

)

Add Product Touchpoint to E-lets

E-let Category	E-let Type Template	Broker Name	FA ID Number	Wire Code
Portfolio Related	Expiring Options			

E-let Count 2

E-let Category	E-let Type Template	Broker Name	FA ID Number	Wire Code
Portfolio Related	Expiring Options	Phil Hsu		
Portfolio Related	Closing Balance	Jim Schmitz		

FIG. 25

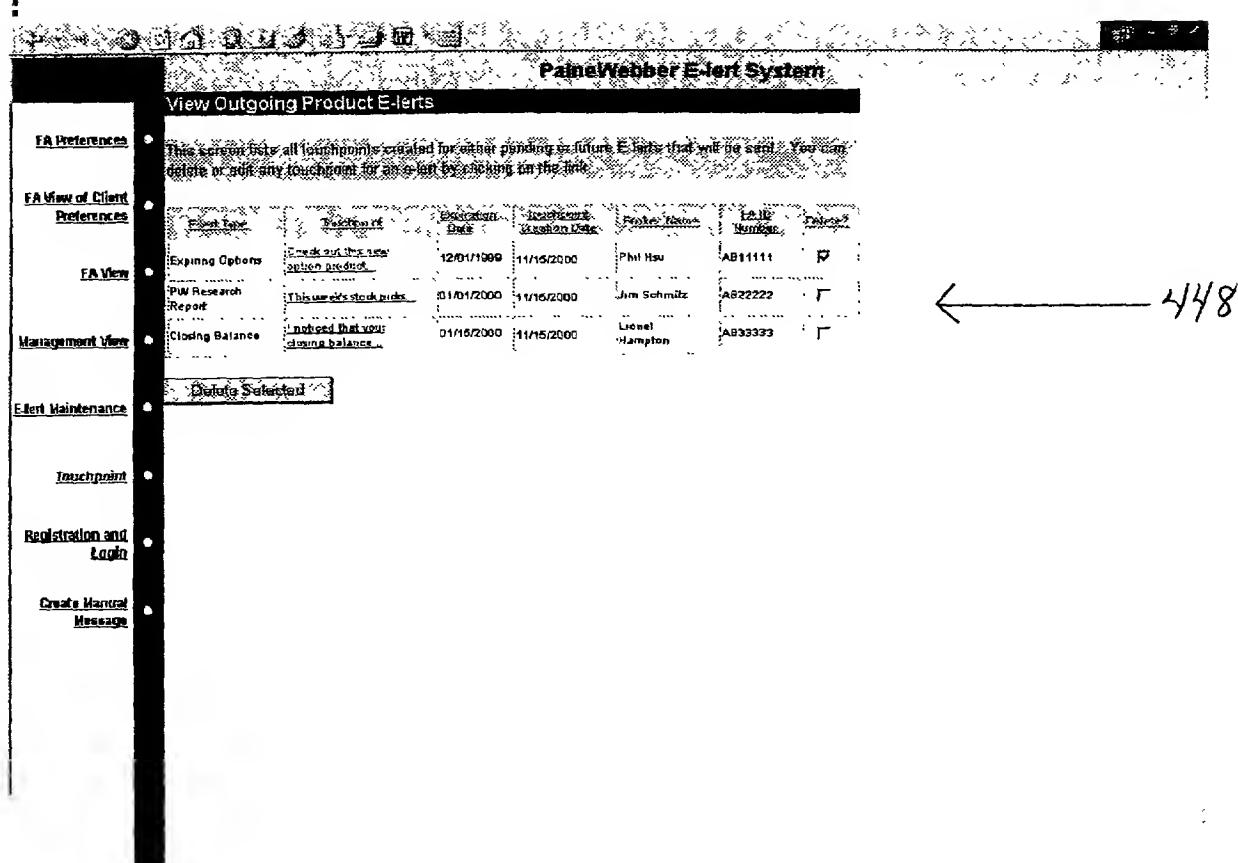


FIG. 26

Populate Template - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: C:\T\POSTWORK\DELVRBL\FILES\b2\_Prototype\Touchpoint\sf\_product\_elet.htm

Edit Outgoing Product E-lert

Subject: Expiring Options

Expires on (mm/dd/yyyy) [01/01/2000]

E-lert Template Text

You <number> options of <stock> at <strike price> strike price are expiring <expiration date>

Please check out this product.

newproduct.doc  
look\_at\_this\_doc

Add Attachment

Submit

← 450

FIG. 27

452

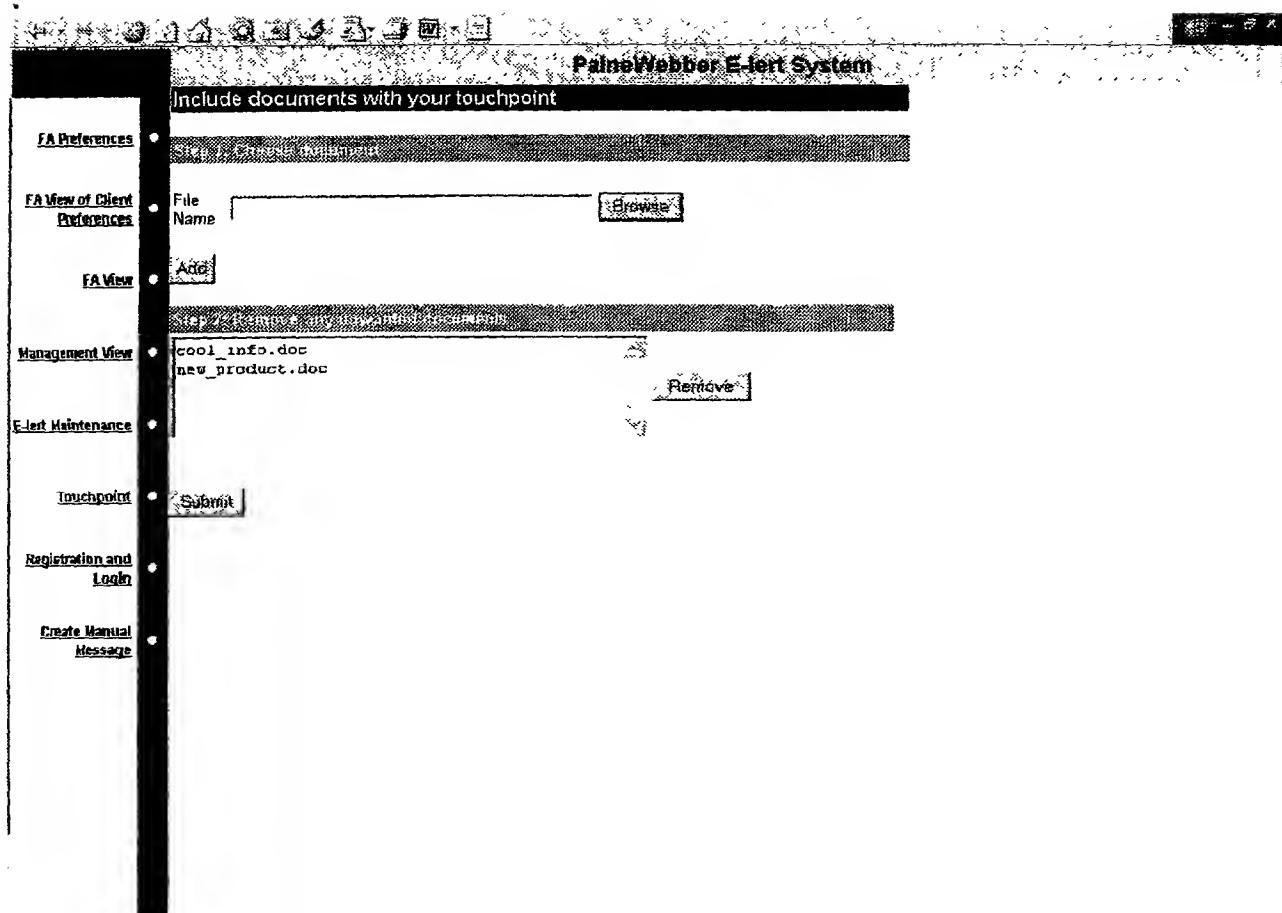


FIG. 28

## **Additional Features 460**

**Online Chat  
System 462**

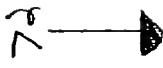
**Video  
Conferencing  
System 464**

**Webcasting  
System 466**

**FIG. 29**

E-LERT TYPE: TRADE ACTIVITY——— 73

FROM: ELECTRONIC MESSAGING SYSTEM  
SUBJECT: MESSAGE ABOUT YOUR PORTFOLIO



THE FOLLOWING E-LERT(S) ARE NOW AVAILABLE IN YOUR INBOX:——— 74

ORDER STATUS - OPEN——— 76

TO ACCESS YOUR MESSAGE(S), CLICK ON THE LINK BELOW TO LOG ON. THEN CLICK THE E-LERT TAB.

[HTTP://WWW.XYZ.ABZ](http://www.xyz.abz)——— 78

NOTE: THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.

80

FIG. 30

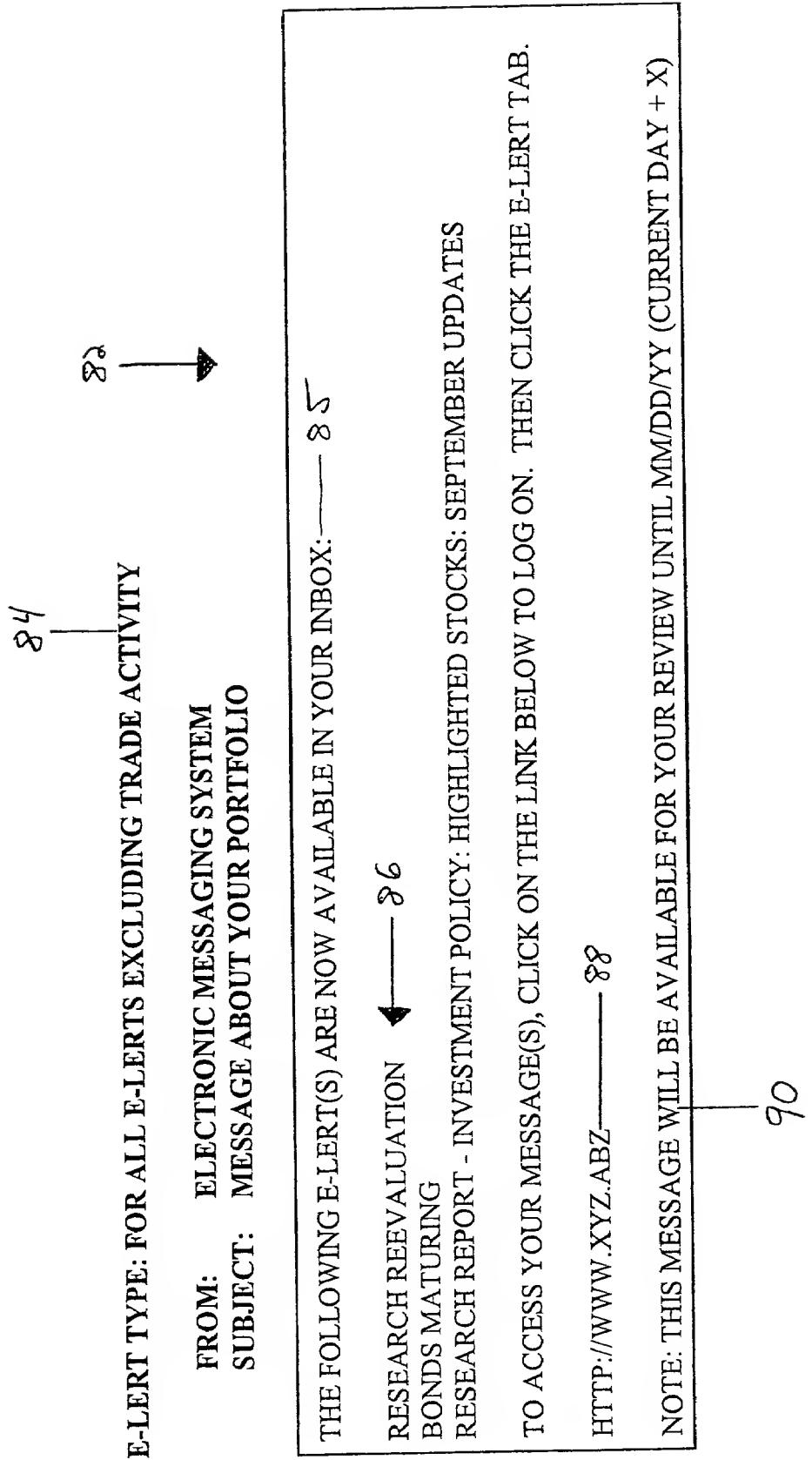
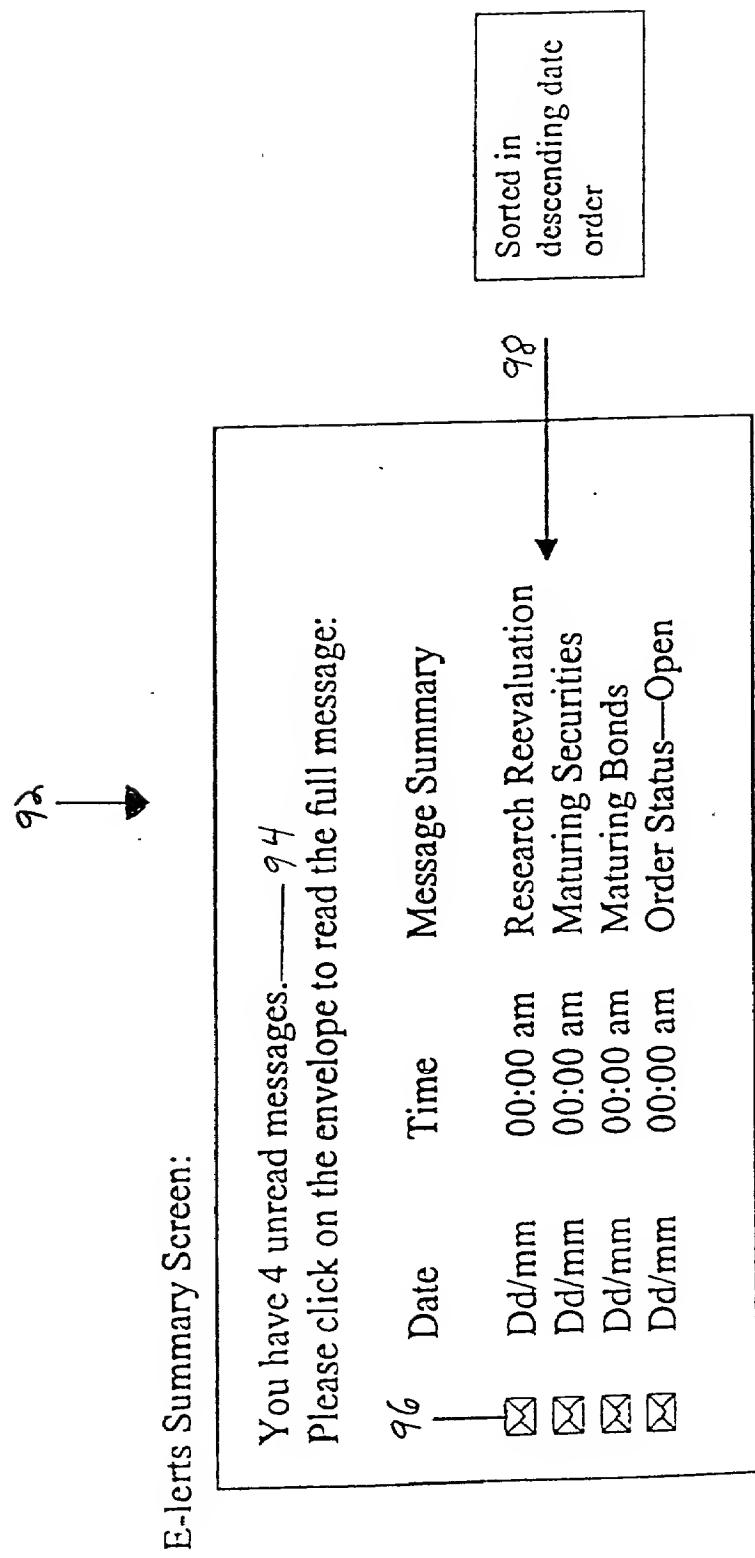


FIG. 31

FIG. 32



The diagram illustrates a table structure with five rows. The first four rows have arrows pointing from their right side to specific text in the fifth row. The fifth row contains five distinct sections of text, each preceded by a curved arrow pointing from the right side of its respective row.

ALERTS	MESSAGE SUMMARY	IN-BOX MESSAGE TEXT
RESEARCH REEVALUATION	THE FOLLOWING SECURITIES IN YOUR PORTFOLIO HAVE RECEIVED NEW RATINGS FROM THE INTERNAL RESEARCH DEPARTMENT.	/18
EXPIRING OPTIONS	THE FOLLOWING OPTIONS IN YOUR PORTFOLIO WILL BE EXPIRING IN THE NEXT 2 WEEKS.	/19
MATURING SECURITIES	THE FOLLOWING BONDS IN YOUR PORTFOLIO WILL BE MATURING IN THE NEXT 2 WEEKS.	/17
CALLED BONDS	THE FOLLOWING BONDS IN YOUR PORTFOLIO ARE SCHEDULED TO BE CALLED IN THE NEXT 2 WEEKS.	/19
TRADING ALERTS	SEE ATTACHMENT D FOR FULL MESSAGE TEXT SEE ATTACHMENT E FOR FULL MESSAGE TEXT	/21
	SEE ATTACHMENT F FOR FULL MESSAGE TEXT SEE ATTACHMENT G FOR FULL MESSAGE APPROVAL	

FIG. 33

**TYPE: RESEARCH REEVALUATION**

1/3



**RESEARCH REEVALUATION - THE FOLLOWING SECURITY(S) IN YOUR PORTFOLIO HAVE RECEIVED NEW RATINGS FROM THE INTERNAL RESEARCH DEPARTMENT:**

A/C#	ACTION	SYMBOL	SECURITY DESCRI.	QTY.	CLOSING PRICE	CLOSING MKT. VALUE	NEW RATING	OLD RATING	DATE ATTRACT
XXX	DOWN	DOW	DOW CHEM.	1,196L	114 3/4	\$137,241	NEUTRAL	NEUTRAL	1/1/00

**PLEASE CONTACT YOUR FINANCIAL ADVISOR IF YOU HAVE ANY QUESTIONS OR WOULD LIKE TO DISCUSS THIS MATERIAL**

THE INFORMATION ABOVE IS BELIEVED TO BE RELIABLE, BUT ITS ACCURACY CANNOT BE GUARANTEED. THIS COMPANY, ITS AFFILIATED COMPANIES, AND/OR THEIR OFFICERS, DIRECTORS, EMPLOYEES OR STOCKHOLDERS MAY AT TIMES HAVE A POSITION, INCLUDING AN ARBITRAGE POSITION, IN THE SECURITIES DESCRIBED HEREIN AND MAY SELL OR BUY THEM TO OR FROM THEIR CUSTOMERS. THESE COMPANIES MAY FROM TIME TO TIME ACT AS A CONSULTANT TO A COMPANY BEING REPORTED UPON.

1/5

**FIG. 34**

**TYPE: EXPIRING OPTIONS**

**EXPIRING OPTIONS - THE FOLLOWING OPTIONS IN YOUR PORTFOLIO WILL BE EXPIRING IN THE NEXT TWO WEEKS:**

A/C#	SYMBOL	QTY.	SECURITY DESCRI.	EXPR. DATE	STRIKE PRICE	OPTION STOCK	CLOSING PRICE	CLOSING MKT. VALUE
XXX	CIK	-16S/4	CALL CITI	1/1/00	55	6 1/4	44	-100

**FIG. 35**

**TYPE: CALLED BONDS**

CALLED BONDS - THE FOLLOWING BONDS IN YOUR PORTFOLIO ARE SCHEDULED TO BE CALLED IN THE NEXT TWO WEEKS:

A/C#	SECUR.	QTY.	SECURITY DESCR.	S&P RATE	INT. RATE	MATURING DATE	CALL DATE	CALL PRICE.	QTY CALLED	BOND VAL.
XXX	B44YY6	10L	NJ HEALTH	AAA	6.750	1/1/01	1/1/00	1020.00	10L	\$10,200

**FIG. 36****TYPE: MATURING SECURITIES**

MATURING SECURITIES - THE FOLLOWING BONDS IN YOUR PORTFOLIO WILL BE MATURING IN THE NEXT TWO WEEKS:

A/C#	SECUR.	QTY.	SECURITY DESCR.	S&P RATE	INT. RATE	MATURING DATE	MATURING VALUE
XXX	E37KV0	5L	TEMPE	AAA	4.750	1/1/01	\$5000

**FIG. 37****TYPE: ORDER STATUS**

ORDER STATUS - OPEN

AN ORDER TO SELL 500 AOL AT MKT IN ACCOUNT AB 22343 HAS BEEN PLACED. ORDER NUMBER AB 1000

THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.

**FIG. 38**

DESCRIPTION	DEFINITION	DELIVERY	SUMMARY	MESSAGE TO CLIENT	MESSAGE
OPEN	A BUY OR SELL THAT HAS NOT BEEN EXECUTED.	IMMEDIATE	ORDER STATUS - OPEN	AN ORDER TO SELL 500 AOL AT MKT DAY IN ACCOUNT AB 22343 HAS BEEN PLACED. ORDER NUMBER AB 1000.	THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.
EXECUTED	EXECUTION MEANS THAT AN ORDER HAS BEEN FILLED (CARRIED OUT).	IMMEDIATE	ORDER STATUS - EXECUTED	YOUR ORDER TO SELL 500 AOL AT MKT IN ACCOUNT AB 22343 HAS BEEN EXECUTED AT AN AVERAGE PRICE OF 98 3/16. THE ESTIMATED TOTAL COST OF THE TRADE IS \$49093.75. ORDER NUMBER AB 1000.	THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.

FIG. 39

DESCRIPTION	DEFINITION	DELIVERY	SUMMARY	MESSAGE TO CLIENT	MESSAGE
PARTIALLY EXECUTED	PART OF AN ORDER HAS BEEN FILLED AND THE REMAINING QUANTITY IS STILL IN FORCE (OPEN) AN AWAITING EXECUTION.	IMMEDIATE	ORDER STATUS - PARTIAL EXECUTION	YOUR ORDER TO BUY 100C AT 46 5/8 IN ACCOUNT AB 22343 HAS BEEN PARTIALLY EXECUTED. 400 C EXECUTED AT 46 1/2. THE ESTIMATED COST OF THE TRADE IS \$18600.00. ORDER NUMBER AB 1001.	THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.
CANCELLED	VOID AN ORDER TO BUY OR SELL.	IMMEDIATE	ORDER STATUS - CANCELED	YOUR ORDER TO BUY 600 C AT 46 5/8 LMT IN ACCOUNT AB 22343 HAS BEEN CANCELED. ORDER NUMBER AB 1001.	THIS IS NOT A LEGAL CONFIRMATION OF YOUR ORDER. INSTEAD IT IS A COMPLETE RECAP OF YOUR ORDER. UPON EXECUTION, AN ACTUAL TRADE CONFIRMATION WILL BE MAILED TO YOU. YOU CAN ALSO CONFIRM THE EXECUTION OF YOUR ORDER BY YOUR FINANCIAL ADVISOR, OR BY REFERRING TO THE TRANSACTION DETAIL SCREEN.

FIG. 40

164

↓

168	170	172	174	176	180
11/5/1999 AB 11111 Expiring Options At W&H The following options are					
11/5/1999 AB 11111 Maturing Bonds The following bonds are maturing					
11/5/1999 AB 11112 Open An order to SELL 500 at MKT					

**Client View**

166

168 170 172 174 176 180

To send the results back directly to your e-mail header, click on the 'Send' button.

E-Alert Count: 3

Status	Date	Account Number	Subject	Message	Status?	Reply To:
<input checked="" type="checkbox"/>	11/5/1999	AB 11111	Expiring Options At W&H The following options are		<input type="checkbox"/>	<input type="checkbox"/> Reply
<input checked="" type="checkbox"/>	11/5/1999	AB 11111	Maturing Bonds The following bonds are maturing		<input type="checkbox"/>	<input type="checkbox"/> Reply
<input type="checkbox"/>	11/5/1999	AB 11112	Open An order to SELL 500 at MKT		<input type="checkbox"/>	<input type="checkbox"/> Reply

**PaineWebber E-Alerts Demonstration**

E-Alerts Your E-Alert Inbox Your E-Alert Preferences

FIG. 41

182

↓

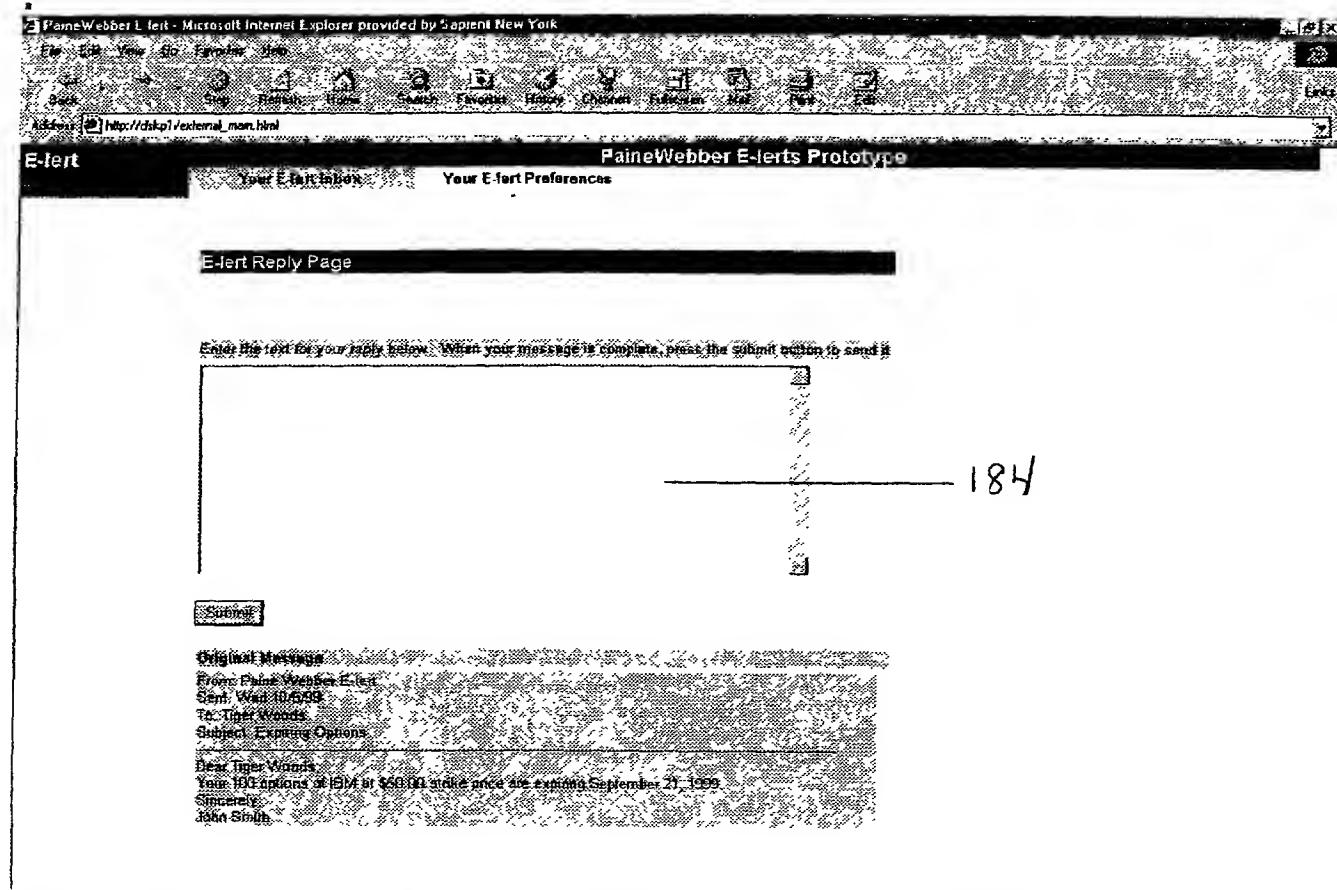
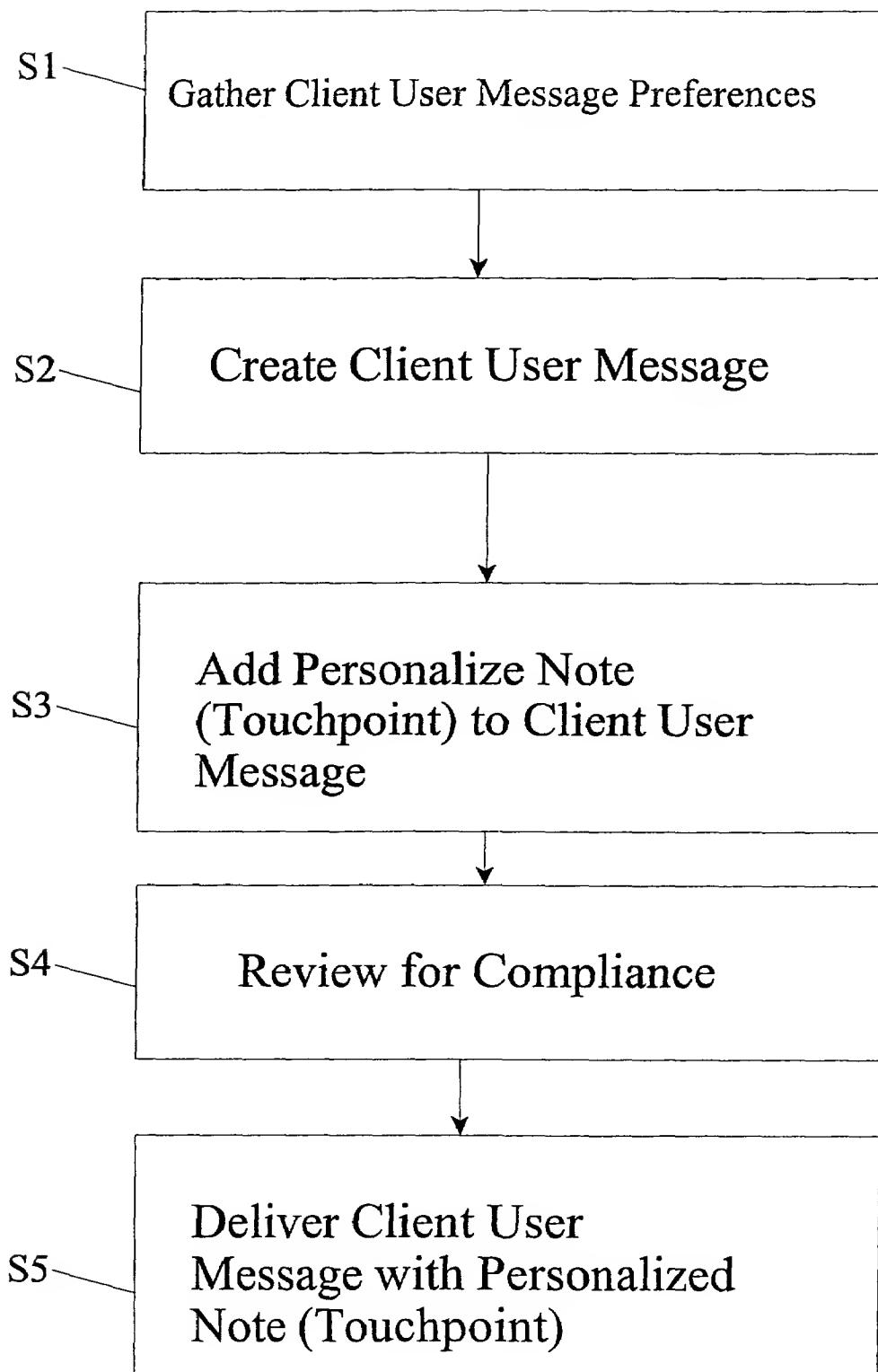


FIG. 42



**FIG. 43**

**DECLARATION FOR PATENT APPLICATION  
SOLE OR JOINT**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention titled:

**SYSTEM AND METHOD FOR DELIVERING A FINANCIAL MESSAGE**

the specification of which is attached hereto.

I HEREBY STATE THAT I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS.

I ACKNOWLEDGE THE DUTY TO DISCLOSE INFORMATION WHICH IS MATERIAL TO THE EXAMINATION OF THIS APPLICATION IN ACCORDANCE WITH TITLE 37, CODE OF FEDERAL REGULATIONS, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

**Prior Foreign Application(s)**

(Number)	(Country)	(Day/Month/Year Filed)	Priority Claimed	Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States applications listed below and, INsofar AS THE SUBJECT MATTER OF EACH OF THE CLAIMS OF THIS APPLICATION IS NOT DISCLOSED IN THE PRIOR UNITED STATES APPLICATION IN THE MANNER PROVIDED BY THE FIRST PARAGRAPH OF TITLE 35, UNITED STATES CODE, §112, I ACKNOWLEDGE THE DUTY TO DISCLOSE MATERIAL INFORMATION AS DEFINED IN TITLE 37, CODE OF FEDERAL REGULATIONS, §1.56(a) WHICH OCCURRED BETWEEN THE FILING DATE OF THE PRIOR APPLICATION AND THE NATIONAL OR PCT INTERNATIONAL FILING DATE OF THIS APPLICATION:

(Application Serial Number)	(Filing Date)	(STATUS: Patented, Pending, Abandoned)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected herewith (List name and registration number).

(LIST SENIOR PATENT COUNSEL AND ATTORNEY HANDLING CASE WITH PATENT OFFICE REGISTRATION NUMBERS.)

Leslie Gladstone Restaino	Robert I. Pearlman	Christopher G. Izzo
Name	Name	Name
38,893	18,881	46,795
Registration Number	Registration Number	Registration Number

SEND CORRESPONDENCE TO: Riker, Danzig, Scherer, Hyland & Perretti LLP  
Headquarters Plaza  
One Speedwell Avenue  
Morristown, New Jersey 07962

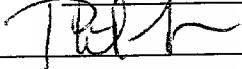
DIRECT TELEPHONE CALLS TO: (973) 538-0800, ext. 522  
Leslie Gladstone Restaino

## DECLARATION FOR PATENT APPLICATION—SOLE OR JOINT (Continued)

Attorney's Docket No.: 4034-61 – Page 2

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF SOLE OR FIRST INVENTOR Phillip Koh-Kwe Hsu

INVENTOR'S SIGNATURE  Date 10/9/00

RESIDENCE River Edge, New Jersey (County of Bergen)

CITIZENSHIP United States of America

POST OFFICE ADDRESS 827 Bogert Road  
River Edge, New Jersey 07661

FULL NAME OF SECOND JOINT INVENTOR Susan M. Carlos

INVENTOR'S SIGNATURE  Date 10/9/00

RESIDENCE Scotch Plains, New Jersey (County of Union)

CITIZENSHIP United States of America

POST OFFICE ADDRESS 2107 Newark Avenue  
Scotch Plains, New Jersey 07076

FULL NAME OF THIRD JOINT INVENTOR \_\_\_\_\_

INVENTOR'S SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_

RESIDENCE \_\_\_\_\_

CITIZENSHIP \_\_\_\_\_

POST OFFICE ADDRESS \_\_\_\_\_

FULL NAME OF FOURTH JOINT INVENTOR \_\_\_\_\_

INVENTOR'S SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_

RESIDENCE \_\_\_\_\_

CITIZENSHIP \_\_\_\_\_

POST OFFICE ADDRESS \_\_\_\_\_

FULL NAME OF FIFTH JOINT INVENTOR \_\_\_\_\_

INVENTOR'S SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_

RESIDENCE \_\_\_\_\_

CITIZENSHIP \_\_\_\_\_

POST OFFICE ADDRESS \_\_\_\_\_